

## SEQUENCE LISTING

&lt;110&gt; Oregon Health Sciences University

&lt;120&gt; Cloning of Rhadinovirus Genome and Methods for its Use

&lt;130&gt; 53683

&lt;140&gt; PCT/US99/26260

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&lt;150&gt; 60/109,409

&lt;151&gt; 1998-11-20

&lt;160&gt; 179

&lt;170&gt; PatentIn Ver. 2.1

&lt;210&gt; 1

&lt;211&gt; 133719

&lt;212&gt; DNA

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 1

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ggctgctagt	agggctgctg	ggctgctagt	agggctgcct	gctggcttgc	ttgcttgctt	133560
gctagtgggg	ccgcttgctt	gctactaggg	ctgctgtgca	gctgggagaa	cagagtaggg	133620
ctgcccggcca	gctgcgtgcg	agggcgctccg	agggccagac	gaggacacgg	gacccggggc	133680
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 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

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 1 5 10 15  
 ctt ttg cct gca aaa tta act tct gtt cca acg tgg tgt cca cca cat 96  
 Leu Leu Pro Ala Lys Leu Thr Ser Val Pro Thr Trp Cys Pro Pro His  
 20 25 30  
 ccc gga gat acc tac ttg cta acc tgc cgc ggg acg tct acg gcc aga 144  
 Pro Gly Asp Thr Tyr Leu Leu Thr Cys Arg Gly Thr Ser Thr Ala Arg  
 35 40 45  
 gac cag cga agc aca caa tgg ttt cgc aac aac acg ctt atg cgt ggg 192  
 Asp Gln Arg Ser Thr Gln Trp Phe Arg Asn Asn Thr Leu Met Arg Gly  
 50 55 60  
 agt aat ttc tac ggc aga ctg gta tct gtg act ccc aat gct acg ata 240  
 Ser Asn Phe Tyr Gly Arg Leu Val Ser Val Thr Pro Asn Ala Thr Ile  
 65 70 75 80  
 tct gac cgg tat gcg tgt caa aca aaa aca aca acg cgg agt aac aac 288  
 Ser Asp Arg Tyr Ala Cys Gln Thr Lys Thr Thr Thr Arg Ser Asn Asn  
 85 90 95  
 atc gat ttt cgg gta agc tca tcg cgc ctc acg ctc caa gaa cgg tgc 336  
 Ile Asp Phe Arg Val Ser Ser Ser Arg Leu Thr Leu Gln Glu Arg Cys  
 100 105 110  
 tct tca tac ggc tat act tac gcg aat aac aca agg gta ttg agg tgt 384  
 Ser Ser Tyr Gly Tyr Thr Tyr Ala Asn Asn Thr Arg Val Leu Arg Cys  
 115 120 125  
 tac tct ggt gga aac gta act tta aga aac gtt gtc ttt cat tta aac 432  
 Tyr Ser Gly Gly Asn Val Thr Leu Arg Asn Val Val Phe His Leu Asn  
 130 135 140  
 ggt aca gcg gtc atc aac ggt act aca aca aac ata cat aca ttt gtg 480  
 Gly Thr Ala Val Ile Asn Gly Thr Thr Thr Asn Ile His Thr Phe Val  
 145 150 155 160  
 tta aca gaa aag aca gga ggg acg tat ttc tgt tct gcg ttt att ggg 528  
 Leu Thr Glu Lys Thr Gly Gly Thr Tyr Phe Cys Ser Ala Phe Ile Gly  
 165 170 175  
 aat gaa aaa ttc tat tct cag aca att aat gtg ttt ttt act tca ttt 576  
 Asn Glu Lys Phe Tyr Ser Gln Thr Ile Asn Val Phe Phe Thr Ser Phe  
 180 185 190  
 acc ttt aaa cct aca aac gac att ccc aat gag tca cat ttt aat aaa 624  
 Thr Phe Lys Pro Thr Asn Asp Ile Pro Asn Glu Ser His Phe Asn Lys  
 195 200 205

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act ggg caa ata caa caa aca gct agt gta caa cat cct gaa aac tac 672
Thr Gly Gln Ile Gln Gln Thr Ala Ser Val Gln His Pro Glu Asn Tyr
210 215 220

gtt gtg ttc tct gtt ccc gtt ttt tct att ggc gtt tta aca ggt att 720
Val Val Phe Ser Val Pro Val Phe Ser Ile Gly Val Leu Thr Gly Ile
225 230 235 240

gca ata tcg ttg att atg tgt tgg tta ttt aca ata cgc tgc aac gag 768
Ala Ile Ser Leu Ile Met Cys Trp Leu Phe Thr Ile Arg Cys Asn Glu
245 250 255

aac tct gaa tca tca act aat agt tat gca agc cag aca agc tac att 816
Asn Ser Glu Ser Ser Thr Asn Ser Tyr Ala Ser Gln Thr Ser Tyr Ile
260 265 270

caa ccc tcc cat aat cag cgt tcc aat act aat gaa tgt agt cgc cat 864
Gln Pro Ser His Asn Gln Arg Ser Asn Thr Asn Glu Cys Ser Arg His
275 280 285

acc tac aga aat gct cat caa gaa gag agt att gaa gaa cta cca aac 912
Thr Tyr Arg Asn Ala His Gln Glu Glu Ser Ile Glu Glu Leu Pro Asn
290 295 300

caa cac aca agt gaa act gat tct tgc tgt caa tta gtt tta ctt gaa 960
Gln His Thr Ser Glu Thr Asp Ser Cys Cys Gln Leu Val Leu Leu Glu
305 310 315 320

gtg aaa aat gta gcc tac gat gga ccg cag gaa aac aca att aac gaa 1008
Val Lys Asn Val Ala Tyr Asp Gly Pro Gln Glu Asn Thr Ile Asn Glu
325 330 335

gtt atg gaa cag tat gat gat gtg gtt gta aaa aat ata gaa caa aca 1056
Val Met Glu Gln Tyr Asp Asp Val Val Lys Asn Ile Glu Gln Thr
340 345 350

tca tat gag gat aat gtt gag cac atg gac tat agt gat act ata aat 1104
Ser Tyr Glu Asp Asn Val Glu His Met Asp Tyr Ser Asp Thr Ile Asn
355 360 365

ccc aat ttt aat tac tac agt gga cta ata ttg gaa gaa gta gat gaa 1152
Pro Asn Phe Asn Tyr Tyr Ser Gly Leu Ile Leu Glu Glu Val Asp Glu
370 375 380

gtt ttt tac aat gaa cta gaa aat caa tat cat gga tta ata ctg gag 1200
Val Phe Tyr Asn Glu Leu Glu Asn Gln Tyr His Gly Leu Ile Leu Glu
385 390 395 400

aat tta gat cac aat gag tac aat cat tta aat gaa tta aac atg ata 1248
Asn Leu Asp His Asn Glu Tyr Asn His Leu Asn Glu Leu Asn Met Ile
405 410 415

gaa caa tat gat tgg tta gaa taa 1272
Glu Gln Tyr Asp Trp Leu Glu
420

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<210> 3  
<211> 423  
<212> PRT

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 3

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Leu Leu Pro Ala Lys Leu Thr Ser Val Pro Thr Trp Cys Pro Pro His
          20           25           30
Pro Gly Asp Thr Tyr Leu Leu Thr Cys Arg Gly Thr Ser Thr Ala Arg
          35           40           45
Asp Gln Arg Ser Thr Gln Trp Phe Arg Asn Asn Thr Leu Met Arg Gly
          50           55           60
Ser Asn Phe Tyr Gly Arg Leu Val Ser Val Thr Pro Asn Ala Thr Ile
          65           70           75           80
Ser Asp Arg Tyr Ala Cys Gln Thr Lys Thr Thr Thr Arg Ser Asn Asn
          85           90           95
Ile Asp Phe Arg Val Ser Ser Ser Arg Leu Thr Leu Gln Glu Arg Cys
          100          105          110
Ser Ser Tyr Gly Tyr Thr Tyr Ala Asn Asn Thr Arg Val Leu Arg Cys
          115          120          125
Tyr Ser Gly Gly Asn Val Thr Leu Arg Asn Val Val Phe His Leu Asn
          130          135          140
Gly Thr Ala Val Ile Asn Gly Thr Thr Thr Asn Ile His Thr Phe Val
          145          150          155          160
Leu Thr Glu Lys Thr Gly Gly Thr Tyr Phe Cys Ser Ala Phe Ile Gly
          165          170          175
Asn Glu Lys Phe Tyr Ser Gln Thr Ile Asn Val Phe Phe Thr Ser Phe
          180          185          190
Thr Phe Lys Pro Thr Asn Asp Ile Pro Asn Glu Ser His Phe Asn Lys
          195          200          205
Thr Gly Gln Ile Gln Gln Thr Ala Ser Val Gln His Pro Glu Asn Tyr
          210          215          220
Val Val Phe Ser Val Pro Val Phe Ser Ile Gly Val Leu Thr Gly Ile
          225          230          235          240
Ala Ile Ser Leu Ile Met Cys Trp Leu Phe Thr Ile Arg Cys Asn Glu
          245          250          255
Asn Ser Glu Ser Ser Thr Asn Ser Tyr Ala Ser Gln Thr Ser Tyr Ile
          260          265          270
Gln Pro Ser His Asn Gln Arg Ser Asn Thr Asn Glu Cys Ser Arg His
          275          280          285
Thr Tyr Arg Asn Ala His Gln Glu Glu Ser Ile Glu Glu Leu Pro Asn
          290          295          300
Gln His Thr Ser Glu Thr Asp Ser Cys Cys Gln Leu Val Leu Leu Glu
          305          310          315          320
Val Lys Asn Val Ala Tyr Asp Gly Pro Gln Glu Asn Thr Ile Asn Glu
          325          330          335
Val Met Glu Gln Tyr Asp Asp Val Val Val Lys Asn Ile Glu Gln Thr
          340          345          350
Ser Tyr Glu Asp Asn Val Glu His Met Asp Tyr Ser Asp Thr Ile Asn
          355          360          365
Pro Asn Phe Asn Tyr Tyr Ser Gly Leu Ile Leu Glu Glu Val Asp Glu
          370          375          380
Val Phe Tyr Asn Glu Leu Glu Asn Gln Tyr His Gly Leu Ile Leu Glu
          385          390          395          400
Asn Leu Asp His Asn Glu Tyr Asn His Leu Asn Glu Leu Asn Met Ile
          405          410          415
Glu Gln Tyr Asp Trp Leu Glu
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<211> 567  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(567)

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 1 5 10 15  
 att ggt aaa aac gga aca atg cct tgg ccg tac ctt aga aac gaa atg 96  
 Ile Gly Lys Asn Gly Thr Met Pro Trp Pro Tyr Leu Arg Asn Glu Met  
 20 25 30  
 atg tat ttt cag aaa atg acg tct acg cca tcg gtt gta ggt gaa aag 144  
 Met Tyr Phe Gln Lys Met Thr Ser Thr Pro Ser Val Val Gly Glu Lys  
 35 40 45  
 aat gtg gtt att atg ggg aaa aga aca tgg ttt tcc atc cct gaa aag 192  
 Asn Val Val Ile Met Gly Lys Arg Thr Trp Phe Ser Ile Pro Glu Lys  
 50 55 60  
 aag cgc cct ctg gtg aac aga att aat att att ttg agc aga gaa tta 240  
 Lys Arg Pro Leu Val Asn Arg Ile Asn Ile Ile Leu Ser Arg Glu Leu  
 65 70 75 80  
 cgt gaa cca ccg cac gga gca cac ttt cta gcg aga acg cta gac gat 288  
 Arg Glu Pro Pro His Gly Ala His Phe Leu Ala Arg Thr Leu Asp Asp  
 85 90 95  
 gcg ttt aat ttc tat aga caa tac aaa cta aaa gaa caa tta aac acg 336  
 Ala Phe Asn Phe Tyr Arg Gln Tyr Lys Leu Lys Glu Gln Leu Asn Thr  
 100 105 110  
 gtc tgg gtt att gga gga aaa tct gtt tat gag agt gtt ctt aac tat 384  
 Val Trp Val Ile Gly Gly Lys Ser Val Tyr Glu Ser Val Leu Asn Tyr  
 115 120 125  
 aag tgt ccc tta aaa cta tat att acg cgc att atg gag agt ttt gat 432  
 Lys Cys Pro Leu Lys Leu Tyr Ile Thr Arg Ile Met Glu Ser Phe Asp  
 130 135 140  
 tgt gat gta ttt ttt cca tca att aat ttt acc gaa tac acc atg tta 480  
 Cys Asp Val Phe Phe Pro Ser Ile Asn Phe Thr Glu Tyr Thr Met Leu  
 145 150 155 160  
 tca gag ata ccg ggc aaa gat aca aac ttt gag gaa aat gga att aaa 528  
 Ser Glu Ile Pro Gly Lys Asp Thr Asn Phe Glu Glu Asn Gly Ile Lys  
 165 170 175  
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 Tyr Lys Phe Gln Val Tyr Glu Lys Asn Phe Asn Lys  
 180 185

<210> 5  
 <211> 188  
 <212> PRT

<213> Macaca mulatta rhadinovirus 17577

<400> 5

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Met Tyr Phe Gln Lys Met Thr Ser Thr Pro Ser Val Val Gly Glu Lys
           35           40           45
Asn Val Val Ile Met Gly Lys Arg Thr Trp Phe Ser Ile Pro Glu Lys
           50           55           60
Lys Arg Pro Leu Val Asn Arg Ile Asn Ile Ile Leu Ser Arg Glu Leu
           65           70           75           80
Arg Glu Pro Pro His Gly Ala His Phe Leu Ala Arg Thr Leu Asp Asp
           85           90           95
Ala Phe Asn Phe Tyr Arg Gln Tyr Lys Leu Lys Glu Gln Leu Asn Thr
           100          105          110
Val Trp Val Ile Gly Gly Lys Ser Val Tyr Glu Ser Val Leu Asn Tyr
           115          120          125
Lys Cys Pro Leu Lys Leu Tyr Ile Thr Arg Ile Met Glu Ser Phe Asp
           130          135          140
Cys Asp Val Phe Phe Pro Ser Ile Asn Phe Thr Glu Tyr Thr Met Leu
           145          150          155          160
Ser Glu Ile Pro Gly Lys Asp Thr Asn Phe Glu Glu Asn Gly Ile Lys
           165          170          175
Tyr Lys Phe Gln Val Tyr Glu Lys Asn Phe Asn Lys
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<210> 6

<211> 1938

<212> DNA

<213> Macaca mulatta rhadinovirus 17577

<220>

<221> CDS

<222> (1)..(1938)

<400> 6

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gtc cac tgc gat gaa aac tgt aaa cct cca cat ttc acg gaa tat cgc      96
Val His Cys Asp Glu Asn Cys Lys Pro Pro His Phe Thr Glu Tyr Arg
           20           25           30

gtc aag tct aac aca gaa aag gac tta tat agt gtt gga gaa aca gct      144
Val Lys Ser Asn Thr Glu Lys Asp Leu Tyr Ser Val Gly Glu Thr Ala
           35           40           45

gaa tta att tgt cgt cct ggt tat gtt aca aat aca aaa ata ata aca      192
Glu Leu Ile Cys Arg Pro Gly Tyr Val Thr Asn Thr Lys Ile Ile Thr
           50           55           60

aca gaa tgt tta caa aat ggt acg tgg tca aca cca aat ttt cca tgc      240
Thr Glu Cys Leu Gln Asn Gly Thr Trp Ser Thr Pro Asn Phe Pro Cys
           65           70           75           80

gac aga aaa aga tgt ccc aca cct gct gac ttg ctg aat gga gcc gtg      288

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Asp	Arg	Lys	Arg	Cys	Pro	Thr	Pro	Ala	Asp	Leu	Leu	Asn	Gly	Ala	Val		
				85					90					95			
cac	att	cac	ggg	gga	gat	aat	gcc	tta	aaa	ttt	gga	tcc	aat	att	tcc	336	
His	Ile	His	Gly	Gly	Asp	Asn	Ala	Leu	Lys	Phe	Gly	Ser	Asn	Ile	Ser		
			100					105					110				
tat	gag	tgt	aat	gaa	ggt	tat	gat	tta	att	ggt	agt	aat	ggt	cgt	ttt	384	
Tyr	Glu	Cys	Asn	Glu	Gly	Tyr	Asp	Leu	Ile	Gly	Ser	Asn	Val	Arg	Phe		
			115				120					125					
tgt	att	tta	caa	gac	aca	gaa	aac	gta	aat	tgg	gat	tca	aat	gaa	cca	432	
Cys	Ile	Leu	Gln	Asp	Thr	Glu	Asn	Val	Asn	Trp	Asp	Ser	Asn	Glu	Pro		
			130				135					140					
gtc	tgt	gaa	att	cag	aaa	tgt	att	aaa	cca	ccg	gca	gtg	gaa	cat	ggg	480	
Val	Cys	Glu	Ile	Gln	Lys	Cys	Ile	Lys	Pro	Pro	Ala	Val	Glu	His	Gly		
						150				155					160		
gac	tac	cta	cct	aac	caa	gat	gtt	tat	aac	tat	gga	gat	gca	att	aca	528	
Asp	Tyr	Leu	Pro	Asn	Gln	Asp	Val	Tyr	Asn	Tyr	Gly	Asp	Ala	Ile	Thr		
				165					170						175		
ttt	aaa	tgt	tca	ttg	tcg	tat	aca	ctc	gtt	gga	tca	aca	aca	tta	gta	576	
Phe	Lys	Cys	Ser	Leu	Ser	Tyr	Thr	Leu	Val	Gly	Ser	Thr	Thr	Leu	Val		
			180					185					190				
tgc	acg	tca	aac	aaa	aag	tgg	tca	aac	tct	ttc	cca	acg	tgt	tta	atg	624	
Cys	Thr	Ser	Asn	Lys	Lys	Trp	Ser	Asn	Ser	Phe	Pro	Thr	Cys	Leu	Met		
			195				200					205					
ctc	gta	tgt	gaa	agt	cca	caa	ata	gac	aat	ggg	tac	ata	gac	att	ggc	672	
Leu	Val	Cys	Glu	Ser	Pro	Gln	Ile	Asp	Asn	Gly	Tyr	Ile	Asp	Ile	Gly		
			210				215					220					
ttg	tcc	aga	aga	tac	aac	cat	gga	caa	tca	att	act	gta	aag	tgt	agc	720	
Leu	Ser	Arg	Arg	Tyr	Asn	His	Gly	Gln	Ser	Ile	Thr	Val	Lys	Cys	Ser		
						230				235					240		
gac	ggg	tac	aac	att	gtt	ggg	cct	gaa	aca	tta	acg	tgc	aca	aac	aca	768	
Asp	Gly	Tyr	Asn	Ile	Val	Gly	Pro	Glu	Thr	Leu	Thr	Cys	Thr	Asn	Thr		
				245					250					255			
act	tgg	gtt	cca	cca	tta	cct	aag	tgt	gta	tta	gtt	aca	aat	aac	cca	816	
Thr	Trp	Val	Pro	Pro	Leu	Pro	Lys	Cys	Val	Leu	Val	Thr	Asn	Asn	Pro		
				260				265					270				
agc	aca	ccc	atg	cca	gaa	aca	ccc	atg	cca	gaa	aca	ccc	acg	cca	gat	864	
Ser	Thr	Pro	Met	Pro	Glu	Thr	Pro	Met	Pro	Glu	Thr	Pro	Thr	Pro	Asp		
			275				280					285					
tat	caa	aaa	ata	aat	ttg	tca	acc	gct	aaa	act	gca	aca	aca	cca	aat	912	
Tyr	Gln	Lys	Ile	Asn	Leu	Ser	Thr	Ala	Lys	Thr	Ala	Thr	Thr	Pro	Asn		
			290				295				300						
gcg	ttt	gtt	aca	act	gtt	gtt	tct	cca	gag	aaa	gac	gac	gtt	act	tgt	960	
Ala	Phe	Val	Thr	Thr	Val	Val	Ser	Pro	Glu	Lys	Asp	Asp	Val	Thr	Cys		
					310				315						320		
gta	aag	cct	cat	ttt	gag	cga	ttc	atg	gta	aag	gct	gaa	aat	gac	aag	1008	
Val	Lys	Pro	His	Phe	Glu	Arg	Phe	Met	Val	Lys	Ala	Glu	Asn	Asp	Lys		



				325				330				335				
gaa Glu	aaa Lys	tac Tyr	agt Ser 340	gtt Val	ggt Gly	gcg Ala	agc Ser	gtt Val 345	gag Glu	cta Leu	ata Ile	tgt Cys	cga Arg 350	cca Pro	gga Gly	1056
ttt Phe	act Thr	aaa Lys 355	atg Met	cag Gln	tct Ser	aca Thr	gtt Val 360	tct Ser	gtt Val	gaa Glu	tgt Cys	ttg Leu 365	tcc Ser	aac Asn	gga Gly	1104
aca Thr	tgg Trp 370	act Thr	gct Ala	cca Pro	aat Asn	gcc Ala 375	aag Lys	tgt Cys	cat His	aga Arg	aaa Lys 380	aaa Lys	tgt Cys	cca Pro	acc Thr	1152
cct Pro 385	caa Gln	gaa Glu	ctt Leu	tta Leu	aac Asn 390	gga Gly	gag Glu	tat Tyr	ata Ile	gtt Val 395	aca Thr	agc Ser	gga Gly	gaa Glu	gat Asp 400	1200
gct Ala	ttt Phe	aag Lys	tac Tyr 405	gga Gly	aca Thr	aat Asn	ata Ile	aca Thr	tat Tyr 410	aaa Lys	tgt Cys	aat Asn	gaa Glu	ggt Gly	tat Tyr 415	1248
caa Gln	ctt Leu	tta Leu 420	gga Gly	agt Ser	atg Met	gtg Val	cgg Arg 425	att Ile	tgt Cys	atg Met	ctt Leu	aaa Lys	gac Asp 430	gat Asp	tta Leu	1296
aaa Lys	aca Thr 435	gtt Val	gac Asp	tgg Trp	gag Glu	cca Pro 440	aaa Lys	gcg Ala	cct Pro	ata Ile	tgt Cys	gat Asp 445	att Ile	gaa Glu	aaa Lys	1344
tgt Cys	aag Lys 450	cca Pro	ccg Pro	cca Pro	caa Gln	att Ile 455	aca Thr	aac Asn	gga Gly	aaa Lys	tac Tyr 460	cat His	ccg Pro	gtg Val	aaa Lys	1392
gac Asp 465	ttt Phe	tat Tyr	cag Gln	tat Tyr	ttg Leu 470	gac Asp	acc Thr	gta Val	aca Thr	ttt Phe 475	tcg Ser	tgc Cys	aat Asn	cgt Arg	gac Asp 480	1440
ttt Phe	tct Ser	tta Leu	gtt Val 485	gga Gly	gat Asp	gaa Glu	atg Met	aca Thr	acg Thr 490	tgt Cys	ata Ile	agt Ser	aat Asn	acg Thr 495	tgg Trp	1488
aat Asn	aaa Lys	ccg Pro 500	ttt Phe	cca Pro	aga Arg	tgt Cys	gaa Glu 505	caa Gln	atc Ile	act Thr	tgc Cys	agc Ser	gct Ala 510	cct Pro	aat Asn	1536
att Ile	gca Ala 515	cac His	gga Gly	aag Lys	ctg Leu	cta Leu 520	aca Thr	ggt Gly	tct Ser	tca Ser	agc Ser	gtt Val 525	tac Tyr	aaa Lys	tac Tyr	1584
ggt Gly 530	caa Gln	tct Ser	gtt Val	acc Thr	att Ile	ggt Gly 535	tgt Cys	gaa Glu	act Thr	gga Gly	ttt Phe 540	act Thr	cta Leu	att Ile	ggc Gly	1632
agt Ser 545	gaa Glu	att Ile	tct Ser	aca Thr	tgc Cys 550	aag Lys	gat Asp	tca Ser	tcg Ser	tgg Trp 555	gat Asp	cca Pro	cca Pro	ctt Leu	cct Pro 560	1680
acg Thr	tgc Cys	gtg Val	cca Pro 565	gct Ala	gtt Val 570	tca Ser	atg Met	cct Pro	tct Ser	gac Asp 575	aca Thr	cct Pro	aaa Lys	cca Pro 575	gaa Glu	1728

acc aaa aaa cca aac acg cca acg cca gaa gca ccc aaa cca aac acc 1776  
 Thr Lys Lys Pro Asn Thr Pro Thr Pro Glu Ala Pro Lys Pro Asn Thr  
                   580                                  585                                  590

cca aac gtt gga aca cat aca cca ttc aaa cca cca cca caa aat cca 1824  
 Pro Asn Val Gly Thr His Thr Pro Phe Lys Pro Pro Pro Gln Asn Pro  
                   595                                  600                                  605

cca ata gca ccc cca atg agt aaa tgg aaa agg cat gtc gtg tta gtt 1872  
 Pro Ile Ala Pro Pro Met Ser Lys Trp Lys Arg His Val Val Leu Val  
                   610                                  615                                  620

ctt ttt gca agt gtc gcg tcc ttg tta ttc gta ctt gct gcc ctt tat 1920  
 Leu Phe Ala Ser Val Ala Ser Leu Leu Phe Val Leu Ala Ala Leu Tyr  
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tgt tgt ttt cta aaa taa 1938  
 Cys Cys Phe Leu Lys  
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<210> 7

<211> 645

<212> PRT

<213> Macaca mulatta rhadinovirus 17577

<400> 7

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                   20                                  25                                  30  
 Val Lys Ser Asn Thr Glu Lys Asp Leu Tyr Ser Val Gly Glu Thr Ala  
                   35                                  40                                  45  
 Glu Leu Ile Cys Arg Pro Gly Tyr Val Thr Asn Thr Lys Ile Ile Thr  
                   50                                  55                                  60  
 Thr Glu Cys Leu Gln Asn Gly Thr Trp Ser Thr Pro Asn Phe Pro Cys  
                   65                                  70                                  75                                  80  
 Asp Arg Lys Arg Cys Pro Thr Pro Ala Asp Leu Leu Asn Gly Ala Val  
                   85                                  90                                  95  
 His Ile His Gly Gly Asp Asn Ala Leu Lys Phe Gly Ser Asn Ile Ser  
                   100                                  105                                  110  
 Tyr Glu Cys Asn Glu Gly Tyr Asp Leu Ile Gly Ser Asn Val Arg Phe  
                   115                                  120                                  125  
 Cys Ile Leu Gln Asp Thr Glu Asn Val Asn Trp Asp Ser Asn Glu Pro  
                   130                                  135                                  140  
 Val Cys Glu Ile Gln Lys Cys Ile Lys Pro Pro Ala Val Glu His Gly  
                   145                                  150                                  155                                  160  
 Asp Tyr Leu Pro Asn Gln Asp Val Tyr Asn Tyr Gly Asp Ala Ile Thr  
                   165                                  170                                  175  
 Phe Lys Cys Ser Leu Ser Tyr Thr Leu Val Gly Ser Thr Thr Leu Val  
                   180                                  185                                  190  
 Cys Thr Ser Asn Lys Lys Trp Ser Asn Ser Phe Pro Thr Cys Leu Met  
                   195                                  200                                  205  
 Leu Val Cys Glu Ser Pro Gln Ile Asp Asn Gly Tyr Ile Asp Ile Gly  
                   210                                  215                                  220  
 Leu Ser Arg Arg Tyr Asn His Gly Gln Ser Ile Thr Val Lys Cys Ser  
                   225                                  230                                  235                                  240  
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Gln Asp Phe Pro Phe Ala Glu Ala Ser Ile Leu Gly Asn Arg Pro Ser	
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Gly Ser Gly Val Phe Ser Leu Pro Ile Leu Tyr Gly Leu Thr Val Glu	
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Asn Glu Leu Cys Glu Glu Ala Arg Ala Leu Phe Gly Tyr Thr Gln Phe	
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 Lys Ser Leu Leu Trp Ile Ile Gln Asp Ile Cys Leu Pro Tyr Cys Met  
 625 630 635 640  
 Ile Tyr Glu Gln Asp Asn Pro Ala Met Gly Ile Leu Pro Ser Glu Trp  
 645 650 655  
 Leu Lys Met His Phe Gln Thr Leu Trp Thr Asn Phe Lys Ala Ala Cys  
 660 665 670  
 Leu Asp Arg Gly Val Leu Thr Gly Cys Glu Leu Lys Ile Val His Arg  
 675 680 685  
 Asp Met Phe Cys Asp Phe Phe Asp Thr Asp Ala Gly Ser Asn Gly Leu  
 690 695 700  
 Met Ala Pro Phe Lys Met Gln Val Arg Ile Ala Arg Ala Met Met Val  
 705 710 715 720  
 Val Pro Lys Ser Ile Lys Ile Lys Asn Arg Ile Ile Phe Ser Asn Thr  
 725 730 735  
 Ala Gly Ser Glu Ala Val Gln Ser Gly Phe Val Lys Pro Thr Gly Thr  
 740 745 750  
 Arg Asp Thr Tyr Val Val Ala Gly Pro Tyr Met Lys Phe Leu Asn Ser  
 755 760 765  
 Leu His Arg Ala Leu Phe Pro Asp Thr Lys Thr Ala Ala Leu Tyr Leu  
 770 775 780  
 Trp His Lys Ile Ser Gln Thr Asn Lys Thr Pro Val Leu Lys Asp Val  
 785 790 795 800  
 Pro Asp Asp Glu Leu Ala Glu Leu Val Ser Tyr Val Lys Thr Asn Ser  
 805 810 815  
 Leu Ala Phe Glu Glu Thr Asn Val Leu Asp Val Val Pro Asp Ser Leu  
 820 825 830  
 Met Ser Tyr Ala Arg Ile Lys Leu Asn Gly Ala Ile Leu Arg Ala Cys  
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 Gly Gln Ile Gln Phe Tyr Ala Thr Thr Leu His Cys Leu Thr Pro Val  
 850 855 860  
 Leu Gln Thr Ile Asp Ala Glu Glu Tyr Pro His Val Leu Gly Ser Ala  
 865 870 875 880  
 Ala Ile Ala Thr Pro Val Ala Tyr Leu Ala Glu Ile Arg Gly Arg Thr  
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 Ala Leu Thr Val Gln Thr Thr Ala Arg Gln Pro Val Ala Ala Thr Gly  
 900 905 910  
 Arg Leu Arg Pro Val Ile Thr Val Pro Met Val Val Asn Lys Tyr Thr  
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 Gly Val Asn Gly Asn Asn Asn Val Phe His Cys Gly Asn Leu Gly Tyr  
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 Phe Ala Gly Arg Gly Val Asp Arg Asn Leu Trp Pro Glu Ser Ser Pro  
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 965 970 975  
 Met Thr Pro Ile Ile Asp Arg Leu Ile Lys Arg Ala Ala Gly Gln Thr  
 980 985 990  
 Ile Ser Thr Phe Glu Ala Glu Ser Val Lys Arg Ser Val Gln Ala Leu  
 995 1000 1005  
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 1010 1015 1020  
 Leu Ile Arg His Leu Gly Lys Gly Cys Gln Asp Leu Ser Ser Glu Asp  
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 Val Gln Tyr Tyr Leu Gly Asp Tyr Cys Met Leu Thr Asp Glu Val Leu  
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 Phe Thr Leu Asp Asn Ile Ala Gln Ser Gly Val Pro Trp Thr Ile Glu  
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 Asp Ala Gly Ala Leu Ile Glu Asp Arg Gln Asp Ala Asp Asp Leu Gln

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      1075              1080              1085
Phe Val Asp Ser Asp Asp Ile Ala Thr Ala Ser Cys Gln Pro Pro Glu
      1090              1095              1100
Glu Gln Leu Pro Thr Pro Ser Ala Gly Ala Leu Leu Ala Gly Lys Lys
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Arg Lys Ile Asn Ala Leu Leu Ser Asp Leu Asp Leu
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<210> 10
<211> 2061
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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<221> CDS
<222> (1)..(2061)

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gtc gac ttg agt ctg gtt atc ttt gcg gac ccg cga agt atc gac ggt      96
Val Asp Leu Ser Leu Val Ile Phe Ala Asp Pro Arg Ser Ile Asp Gly
              20              25              30

gcc cgc att cta aaa aca aaa aca cag ata gag aac ctg aac cgc gac      144
Ala Arg Ile Leu Lys Thr Lys Thr Gln Ile Glu Asn Leu Asn Arg Asp
              35              40              45

ctt ctg ccg ctg cta cgc gag caa aac tcg gta gag acg tcc agc ctg      192
Leu Leu Pro Leu Leu Arg Glu Gln Asn Ser Val Glu Thr Ser Ser Leu
      50              55              60

tcg ctc gaa gtg gag cac ctg gcc aaa aac atc gag gac aaa ctc ggc      240
Ser Leu Glu Val Glu His Leu Ala Lys Asn Ile Glu Asp Lys Leu Gly
      65              70              75              80

gag ctg gag cgc agt ctg cgg cag aga tat tcg agc cga gag cat ttt      288
Glu Leu Glu Arg Ser Leu Arg Gln Arg Tyr Ser Ser Arg Glu His Phe
              85              90              95

gaa aca cta cac ctg aga ccc gaa tgt cac tat cac tct acg gtt act      336
Glu Thr Leu His Leu Arg Pro Glu Cys His Tyr His Ser Thr Val Thr
              100              105              110

ttt cag ttt tac ggg ggc ggg tta ata gat gta aac atg tgc cta ata      384
Phe Gln Phe Tyr Gly Gly Gly Leu Ile Asp Val Asn Met Cys Leu Ile
              115              120              125

aac gat gta gaa ctg ctg tgt aaa aga cta ggg agt gtg ttt tat tgc      432
Asn Asp Val Glu Leu Leu Cys Lys Arg Leu Gly Ser Val Phe Tyr Cys
              130              135              140

atc ggt gca aac gaa gct ctg tcc gga ttg aac cgg gtt ctg acg ttt      480
Ile Gly Ala Asn Glu Ala Leu Ser Gly Leu Asn Arg Val Leu Thr Phe
      145              150              155              160

ctg tca aca ctg cgg ggt atc tcc ccg atc ccg cac cca gac cta tac      528

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Leu Ser Thr Leu Arg Gly Ile Ser Pro Ile Pro His Pro Asp Leu Tyr	
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gtc acg tca gtg cct tgc gta cag tgc ctg agg gaa atc gaa ctc gta	576
Val Thr Ser Val Pro Cys Val Gln Cys Leu Arg Glu Ile Glu Leu Val	
180 185 190	
cca aat cag ggg tcc agt tta ctc gcg gtg ttg gca gac cga cac tgc	624
Pro Asn Gln Gly Ser Ser Leu Leu Ala Val Leu Ala Asp Arg His Cys	
195 200 205	
gat cac ctc tgt aag aag gtt agg gcg gag cca ata cac ggc ctg ttt	672
Asp His Leu Cys Lys Lys Val Arg Ala Glu Pro Ile His Gly Leu Phe	
210 215 220	
gag aca gaa ctg agc cag ctg ggt cta aaa gta aca aaa cgt tcg gac	720
Glu Thr Glu Leu Ser Gln Leu Gly Leu Lys Val Thr Lys Arg Ser Asp	
225 230 235 240	
gcc acg cag cac ggc gtc cgg tcc tct gca gat cag tta agg gag tcg	768
Ala Thr Gln His Gly Val Arg Ser Ser Ala Asp Gln Leu Arg Glu Ser	
245 250 255	
tcg ctg gcg gcc ata caa gat cac aat ata ttc aaa cgg gtg tcc gcg	816
Ser Leu Ala Ala Ile Gln Asp His Asn Ile Phe Lys Arg Val Ser Ala	
260 265 270	
tca atc atg gaa cta tcc aat cta att tat tgg aac gcc ggg caa acc	864
Ser Ile Met Glu Leu Ser Asn Leu Ile Tyr Trp Asn Ala Gly Gln Thr	
275 280 285	
ggc ctc cag acc ggg acc gaa aac gag tgc tca caa atg gcc aga ctg	912
Gly Leu Gln Thr Gly Thr Glu Asn Glu Cys Ser Gln Met Ala Arg Leu	
290 295 300	
cta aca cac gag gcc gat atg cac gag cac cgt gcg cta ata aca ccc	960
Leu Thr His Glu Ala Asp Met His Glu His Arg Ala Leu Ile Thr Pro	
305 310 315 320	
aaa cta agc gcg act cac ttc tac gac tgt ttc cga ccg gat ccc ata	1008
Lys Leu Ser Ala Thr His Phe Tyr Asp Cys Phe Arg Pro Asp Pro Ile	
325 330 335	
gaa tcc ctg ttc tgc ggc ggt ctt ttt aac tct ata gac gac acc ata	1056
Glu Ser Leu Phe Cys Gly Gly Leu Phe Asn Ser Ile Asp Asp Thr Ile	
340 345 350	
aac gca ctg agc cgg gat tgc tcc gtg acg ttc ttt caa cag gca aac	1104
Asn Ala Leu Ser Arg Asp Cys Ser Val Thr Phe Phe Gln Gln Ala Asn	
355 360 365	
tat acc aac gtt atg cga aaa caa aac gag ctg ttc acc aga ctc aat	1152
Tyr Thr Asn Val Met Arg Lys Gln Asn Glu Leu Phe Thr Arg Leu Asn	
370 375 380	
agc atc ctg cgt cag ggg agc gcg gga tcg caa aaa ccg gcc acc ccc	1200
Ser Ile Leu Arg Gln Gly Ser Ala Gly Ser Gln Lys Pro Ala Thr Pro	
385 390 395 400	
tcg gag cca cgg acc acc acc gtg gcg gca acc gcg gca agc gac gtc	1248
Ser Glu Pro Arg Thr Thr Thr Val Ala Ala Thr Ala Ala Ser Asp Val	

405										410										415										
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Ile	Lys	Asp	Ala	Gln	Tyr	Arg	Lys	Glu	Gln	Tyr	Met	Lys	Lys	Val	Ala															
			420					425					430																	
agg	gac	ggc	ttt	aaa	aaa	cta	aca	gag	tgt	ctg	cag	acg	cag	agc	gcg		1344													
Arg	Asp	Gly	Phe	Lys	Lys	Leu	Thr	Glu	Cys	Leu	Gln	Thr	Gln	Ser	Ala															
		435					440					445																		
gtg	ttg	gca	aac	gca	ctc	tgc	atg	cgc	gta	tgg	ggg	ggc	gtc	gcc	tac		1392													
Val	Leu	Ala	Asn	Ala	Leu	Cys	Met	Arg	Val	Trp	Gly	Gly	Val	Ala	Tyr															
	450					455					460																			
ggc	gag	gcg	tcc	gag	ctg	gtg	aac	cat	ttt	ctc	ctc	agg	cgg	cgc	ttc		1440													
Gly	Glu	Ala	Ser	Glu	Leu	Val	Asn	His	Phe	Leu	Leu	Arg	Arg	Arg	Phe															
465					470					475					480															
gtc	gcg	ctt	ccc	tgg	gag	gcg	cgc	tgc	cgc	tcg	gat	cag	att	tta	ttc		1488													
Val	Ala	Leu	Pro	Trp	Glu	Ala	Arg	Cys	Arg	Ser	Asp	Gln	Ile	Leu	Phe															
			485					490						495																
gaa	aac	tca	aag	tac	att	aaa	aac	tca	cta	tat	tcc	cag	cgc	ctc	agt		1536													
Glu	Asn	Ser	Lys	Tyr	Ile	Lys	Asn	Ser	Leu	Tyr	Ser	Gln	Arg	Leu	Ser															
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cgc	gaa	cac	gta	gag	att	atc	acg	ctg	cag	ttt	tac	ggc	ctg	ata	acc		1584													
Arg	Glu	His	Val	Glu	Ile	Ile	Thr	Leu	Gln	Phe	Tyr	Gly	Leu	Ile	Thr															
		515					520					525																		
ggc	ccc	ctg	acg	cgc	cag	agc	gat	ctc	ttt	ccc	ggc	ccc	gcc	aac	gtc		1632													
Gly	Pro	Leu	Thr	Arg	Gln	Ser	Asp	Leu	Phe	Pro	Gly	Pro	Ala	Asn	Val															
	530					535					540																			
gcg	ctg	gcc	cag	tgt	ttc	gag	gcg	gcc	gga	atg	ctt	ccg	cat	cac	aag		1680													
Ala	Leu	Ala	Gln	Cys	Phe	Glu	Ala	Ala	Gly	Met	Leu	Pro	His	His	Lys															
545					550				555						560															
atg	ctg	gtg	tca	gag	atg	ata	tgg	ccc	cag	att	caa	ccg	aaa	gac	tgg		1728													
Met	Leu	Val	Ser	Glu	Met	Ile	Trp	Pro	Gln	Ile	Gln	Pro	Lys	Asp	Trp															
			565				570							575																
ata	gac	cag	aca	ttt	aat	cgt	ttt	tac	caa	ctt	ccc	gaa	ggt	gat	ctc		1776													
Ile	Asp	Gln	Thr	Phe	Asn	Arg	Phe	Tyr	Gln	Leu	Pro	Glu	Gly	Asp	Leu															
		580					585						590																	
aac	gcg	gta	caa	aag	tcc	gcc	tgg	tgc	ttt	ata	cga	gag	ctc	gtc	ctc		1824													
Asn	Ala	Val	Gln	Lys	Ser	Ala	Trp	Cys	Phe	Ile	Arg	Glu	Leu	Val	Leu															
		595					600					605																		
tcg	gtg	gcg	ctt	tat	aat	cgc	acg	tgg	gaa	aag	acg	ctg	cgg	ata	ttt		1872													
Ser	Val	Ala	Leu	Tyr	Asn	Arg	Thr	Trp	Glu	Lys	Thr	Leu	Arg	Ile	Phe															
	610					615					620																			
tcc	cta	gcg	cgc	gag	aaa	ctc	tcc	atc	tcc	aac	cta	gac	gtt	aaa	ggc		1920													
Ser	Leu	Ala	Arg	Glu	Lys	Leu	Ser	Ile	Ser	Asn	Leu	Asp	Val	Lys	Gly															
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ctg	acg	tcc	ggc	ctg	tat	cta	acg	tac	gag	caa	gac	gcg	ccg	ctc	gtt		1968													
Leu	Thr	Ser	Gly	Leu	Tyr	Leu	Thr	Tyr	Glu	Gln	Asp	Ala	Pro	Leu	Val															
			645					650					655																	

cta att tct caa aat acc ggc tgg ata ttt aaa gac ctg tac gct ctt 2016  
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ctg tac cat cac ctg caa ctg tcc gac ggc cat gat gat aac taa 2061  
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<212> PRT

<213> Macaca mulatta rhadinovirus 17577

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 Ala Arg Ile Leu Lys Thr Lys Thr Gln Ile Glu Asn Leu Asn Arg Asp  
                                   35                                  40                                  45  
 Leu Leu Pro Leu Leu Arg Glu Gln Asn Ser Val Glu Thr Ser Ser Leu  
                                   50                                  55                                  60  
 Ser Leu Glu Val Glu His Leu Ala Lys Asn Ile Glu Asp Lys Leu Gly  
                                   65                                  70                                  75                                  80  
 Glu Leu Glu Arg Ser Leu Arg Gln Arg Tyr Ser Ser Arg Glu His Phe  
                                   85                                  90                                  95  
 Glu Thr Leu His Leu Arg Pro Glu Cys His Tyr His Ser Thr Val Thr  
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 Phe Gln Phe Tyr Gly Gly Gly Leu Ile Asp Val Asn Met Cys Leu Ile  
                                   115                                  120                                  125  
 Asn Asp Val Glu Leu Leu Cys Lys Arg Leu Gly Ser Val Phe Tyr Cys  
                                   130                                  135                                  140  
 Ile Gly Ala Asn Glu Ala Leu Ser Gly Leu Asn Arg Val Leu Thr Phe  
                                   145                                  150                                  155                                  160  
 Leu Ser Thr Leu Arg Gly Ile Ser Pro Ile Pro His Pro Asp Leu Tyr  
                                   165                                  170                                  175  
 Val Thr Ser Val Pro Cys Val Gln Cys Leu Arg Glu Ile Glu Leu Val  
                                   180                                  185                                  190  
 Pro Asn Gln Gly Ser Ser Leu Leu Ala Val Leu Ala Asp Arg His Cys  
                                   195                                  200                                  205  
 Asp His Leu Cys Lys Lys Val Arg Ala Glu Pro Ile His Gly Leu Phe  
                                   210                                  215                                  220  
 Glu Thr Glu Leu Ser Gln Leu Gly Leu Lys Val Thr Lys Arg Ser Asp  
                                   225                                  230                                  235                                  240  
 Ala Thr Gln His Gly Val Arg Ser Ser Ala Asp Gln Leu Arg Glu Ser  
                                   245                                  250                                  255  
 Ser Leu Ala Ala Ile Gln Asp His Asn Ile Phe Lys Arg Val Ser Ala  
                                   260                                  265                                  270  
 Ser Ile Met Glu Leu Ser Asn Leu Ile Tyr Trp Asn Ala Gly Gln Thr  
                                   275                                  280                                  285  
 Gly Leu Gln Thr Gly Thr Glu Asn Glu Cys Ser Gln Met Ala Arg Leu  
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 Leu Thr His Glu Ala Asp Met His Glu His Arg Ala Leu Ile Thr Pro  
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 Lys Leu Ser Ala Thr His Phe Tyr Asp Cys Phe Arg Pro Asp Pro Ile  
                                   325                                  330                                  335  
 Glu Ser Leu Phe Cys Gly Gly Leu Phe Asn Ser Ile Asp Asp Thr Ile  
                                   340                                  345                                  350  
 Asn Ala Leu Ser Arg Asp Cys Ser Val Thr Phe Phe Gln Gln Ala Asn



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      355              360              365
Tyr Thr Asn Val Met Arg Lys Gln Asn Glu Leu Phe Thr Arg Leu Asn
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Ser Glu Pro Arg Thr Thr Val Ala Ala Thr Ala Ala Ser Asp Val
      405              410              415
Ile Lys Asp Ala Gln Tyr Arg Lys Glu Gln Tyr Met Lys Lys Val Ala
      420              425              430
Arg Asp Gly Phe Lys Lys Leu Thr Glu Cys Leu Gln Thr Gln Ser Ala
      435              440              445
Val Leu Ala Asn Ala Leu Cys Met Arg Val Trp Gly Gly Val Ala Tyr
      450              455              460
Gly Glu Ala Ser Glu Leu Val Asn His Phe Leu Leu Arg Arg Arg Phe
   465              470              475              480
Val Ala Leu Pro Trp Glu Ala Arg Cys Arg Ser Asp Gln Ile Leu Phe
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Glu Asn Ser Lys Tyr Ile Lys Asn Ser Leu Tyr Ser Gln Arg Leu Ser
      500              505              510
Arg Glu His Val Glu Ile Ile Thr Leu Gln Phe Tyr Gly Leu Ile Thr
      515              520              525
Gly Pro Leu Thr Arg Gln Ser Asp Leu Phe Pro Gly Pro Ala Asn Val
   530              535              540
Ala Leu Ala Gln Cys Phe Glu Ala Ala Gly Met Leu Pro His His Lys
   545              550              555              560
Met Leu Val Ser Glu Met Ile Trp Pro Gln Ile Gln Pro Lys Asp Trp
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Ile Asp Gln Thr Phe Asn Arg Phe Tyr Gln Leu Pro Glu Gly Asp Leu
      580              585              590
Asn Ala Val Gln Lys Ser Ala Trp Cys Phe Ile Arg Glu Leu Val Leu
      595              600              605
Ser Val Ala Leu Tyr Asn Arg Thr Trp Glu Lys Thr Leu Arg Ile Phe
   610              615              620
Ser Leu Ala Arg Glu Lys Leu Ser Ile Ser Asn Leu Asp Val Lys Gly
   625              630              635              640
Leu Thr Ser Gly Leu Tyr Leu Thr Tyr Glu Gln Asp Ala Pro Leu Val
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Leu Ile Ser Gln Asn Thr Gly Trp Ile Phe Lys Asp Leu Tyr Ala Leu
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Leu Tyr His His Leu Gln Leu Ser Asp Gly His Asp Asp Asn
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<210> 12
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ata atc gcg atc ggc acg gcg gtt ggc gaa aac gtc acc acc ccc aag 96
Ile Ile Ala Ile Gly Thr Ala Val Gly Glu Asn Val Thr Thr Pro Lys
      20              25              30

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Pro Pro Glu Asn Pro Pro Arg Ala Glu Ala Phe Lys Phe Arg Val Cys	
50 55 60	
agc gcc tcg gcc acc ggc gaa ctc ttc agg ttt aac ctg gaa aaa acg	240
Ser Ala Ser Ala Thr Gly Glu Leu Phe Arg Phe Asn Leu Glu Lys Thr	
65 70 75 80	
tgt ccg ggc acc gag gac aag acg cac caa gaa ggc atc ctg atg gtg	288
Cys Pro Gly Thr Glu Asp Lys Thr His Gln Glu Gly Ile Leu Met Val	
85 90 95	
ttt aaa aaa aat att gtc ccg cac atc ttt aag gtc aga cgg tac cgc	336
Phe Lys Lys Asn Ile Val Pro His Ile Phe Lys Val Arg Arg Tyr Arg	
100 105 110	
aag gtg gcc acc tcg gtg acc gtc tat cga ggg tgg acc gag acc gcc	384
Lys Val Ala Thr Ser Val Thr Val Tyr Arg Gly Trp Thr Glu Thr Ala	
115 120 125	
gtg acc ggc aag caa gag gtc atc cga ccg gtg ccg cag tac gag atc	432
Val Thr Gly Lys Gln Glu Val Ile Arg Pro Val Pro Gln Tyr Glu Ile	
130 135 140	
aac cac atg gac acg acc tac cag tgt ttc agc tcc atg cgc gta aac	480
Asn His Met Asp Thr Thr Tyr Gln Cys Phe Ser Ser Met Arg Val Asn	
145 150 155 160	
gtc aac ggc ata gta aac acc tac acg gac agg gac ttc act aac cag	528
Val Asn Gly Ile Val Asn Thr Tyr Thr Asp Arg Asp Phe Thr Asn Gln	
165 170 175	
acc gtg ttt ctg caa ccg gtc gag ggg ctc acg gat aac atc cag cga	576
Thr Val Phe Leu Gln Pro Val Glu Gly Leu Thr Asp Asn Ile Gln Arg	
180 185 190	
tac ttc agt cag ccg gtg ctg tac acg aca ccg gga tgg ttt ccg gga	624
Tyr Phe Ser Gln Pro Val Leu Tyr Thr Thr Pro Gly Trp Phe Pro Gly	
195 200 205	
att tac agg gtc aga acc acg gtc aac tgc gag atc gtg gac atg atc	672
Ile Tyr Arg Val Arg Thr Thr Val Asn Cys Glu Ile Val Asp Met Ile	
210 215 220	
gcg cgt tcg gcg gaa ccg tac tcg tat ttt gtc acc gcc ctg gga gac	720
Ala Arg Ser Ala Glu Pro Tyr Ser Tyr Phe Val Thr Ala Leu Gly Asp	
225 230 235 240	
acg gta gag gtg tcc ccg ttc tgc cac aac gac tca acg tgc tcg gtc	768
Thr Val Glu Val Ser Pro Phe Cys His Asn Asp Ser Thr Cys Ser Val	
245 250 255	
gcg gag aaa acc gaa aac ggc ctc ggc gcc cgc gtg ctc aca aat tac	816
Ala Glu Lys Thr Glu Asn Gly Leu Gly Ala Arg Val Leu Thr Asn Tyr	
260 265 270	

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Thr Ile Val Asp Phe Ala Thr Arg Gln Pro Thr Thr Glu Thr Arg Val	
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Phe Ala Asp Ser Gly Glu Tyr Thr Val Ser Trp Lys Ala Glu Asp Pro	
290 295 300	
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Lys Ser Ala Val Cys Ala Leu Thr Leu Trp Lys Thr Phe Pro Arg Ala	
305 310 315 320	
ata cag acg acg cac gag gcc agc tac cac ttc gtg gcc aac gac gtg	1008
Ile Gln Thr Thr His Glu Ala Ser Tyr His Phe Val Ala Asn Asp Val	
325 330 335	
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Thr Ala Thr Phe Thr Ser Pro Leu Ser Gln Val Thr Asn Phe Thr Gly	
340 345 350	
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Thr Tyr Pro Cys Leu Asn Asp Val Ile Gln Lys Thr Leu Asn Ala Thr	
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Ile Lys Lys Leu Ser Asp Thr His Ala Thr Asn Gly Ser Glu Gln Tyr	
370 375 380	
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Tyr Glu Thr Glu Gly Gly Leu Phe Leu Leu Trp Gln Pro Leu Thr Pro	
385 390 395 400	
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Leu Ser Leu Ala Asp Glu Met Arg Glu Leu Asn Gly Thr Thr Pro Ala	
405 410 415	
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Pro Pro Thr Thr Thr Ser Thr Ala Asn Arg Val Arg Arg Ser Val Gly	
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435 440 445	
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Ala Tyr Asp Lys Leu Arg Ala Ser Ile Asn Lys Val Leu Glu Glu Leu	
450 455 460	
tcc agg gcg tgg tgc cga gaa cag gtg agg gac acc tac atg tgg tac	1440
Ser Arg Ala Trp Cys Arg Glu Gln Val Arg Asp Thr Tyr Met Trp Tyr	
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gaa ctg agc aag att aac ccc acc agc gta atg acg gcg ata tac ggg	1488
Glu Leu Ser Lys Ile Asn Pro Thr Ser Val Met Thr Ala Ile Tyr Gly	
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cgg ccg gtg tcg gcc aag ttc gtg ggc gac gcc atc tcc gtg acg gac	1536
Arg Pro Val Ser Ala Lys Phe Val Gly Asp Ala Ile Ser Val Thr Asp	
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tgc gtg gcg gtg gac cag gcg tcc gtc agc atc cac aag agc ctc cgc	1584

Cys	Val	Ala	Val	Asp	Gln	Ala	Ser	Val	Ser	Ile	His	Lys	Ser	Leu	Arg		
		515					520					525					
acg	tcc	acc	ccg	ggg	atc	tgc	tac	tcg	cgc	ccc	ccg	gtc	acg	ttc	agg	1632	
Thr	Ser	Thr	Pro	Gly	Ile	Cys	Tyr	Ser	Arg	Pro	Pro	Val	Thr	Phe	Arg		
	530					535					540						
ttc	ctc	aac	agc	acc	acg	ctg	ttc	aag	ggc	cag	ctg	gga	ccc	aga	aac	1680	
Phe	Leu	Asn	Ser	Thr	Thr	Leu	Phe	Lys	Gly	Gln	Leu	Gly	Pro	Arg	Asn		
545						550				555					560		
gag	atc	ata	ctg	acg	gac	aac	cag	gtg	gag	gcg	tgc	aaa	gag	acg	tgc	1728	
Glu	Ile	Ile	Leu	Thr	Asp	Asn	Gln	Val	Glu	Ala	Cys	Lys	Glu	Thr	Cys		
				565					570					575			
gaa	cac	tac	ttc	ata	gcg	agc	aac	gta	acc	tac	tac	tac	aaa	gac	tac	1776	
Glu	His	Tyr	Phe	Ile	Ala	Ser	Asn	Val	Thr	Tyr	Tyr	Tyr	Lys	Asp	Tyr		
			580					585					590				
gtc	ttc	gtg	aaa	aaa	att	aac	acc	tcc	gag	ata	tcc	acc	ctc	ggg	acg	1824	
Val	Phe	Val	Lys	Lys	Ile	Asn	Thr	Ser	Glu	Ile	Ser	Thr	Leu	Gly	Thr		
		595					600					605					
ttc	atc	gcc	ctg	aac	ctg	tcg	ttt	ata	gag	aac	ata	gat	ttc	agg	gtc	1872	
Phe	Ile	Ala	Leu	Asn	Leu	Ser	Phe	Ile	Glu	Asn	Ile	Asp	Phe	Arg	Val		
	610					615					620						
atc	gag	ctg	tac	agc	cgc	gcg	gag	aaa	aag	ctg	tcc	ggg	agc	gtt	ttc	1920	
Ile	Glu	Leu	Tyr	Ser	Arg	Ala	Glu	Lys	Lys	Leu	Ser	Gly	Ser	Val	Phe		
625					630					635					640		
gat	ata	gaa	acc	atg	ttc	agg	gaa	tac	aac	tac	tac	acg	caa	cgc	ctg	1968	
Asp	Ile	Glu	Thr	Met	Phe	Arg	Glu	Tyr	Asn	Tyr	Tyr	Thr	Gln	Arg	Leu		
				645					650					655			
gcg	gga	ctc	cgg	gag	gac	ctg	gac	aac	acg	atc	gac	ctg	aac	cgc	gac	2016	
Ala	Gly	Leu	Arg	Glu	Asp	Leu	Asp	Asn	Thr	Ile	Asp	Leu	Asn	Arg	Asp		
			660					665					670				
cgc	ctg	gcc	cgc	gac	ctg	tcc	gag	ata	gtc	gcg	gac	ctg	ggc	gat	gtc	2064	
Arg	Leu	Ala	Arg	Asp	Leu	Ser	Glu	Ile	Val	Ala	Asp	Leu	Gly	Asp	Val		
		675					680					685					
ggc	cgc	acg	gtc	gtt	aac	gtg	gcc	agt	agc	gtg	ata	acc	ctg	ttc	gga	2112	
Gly	Arg	Thr	Val	Val	Asn	Val	Ala	Ser	Ser	Val	Ile	Thr	Leu	Phe	Gly		
	690					695					700						
tca	atc	gtg	agc	ggg	ttc	att	aac	ttt	ata	aag	agt	ccg	ttc	ggg	ggc	2160	
Ser	Ile	Val	Ser	Gly	Phe	Ile	Asn	Phe	Ile	Lys	Ser	Pro	Phe	Gly	Gly		
705					710					715					720		
atg	ctc	atg	atc	ctg	gtg	att	gtg	gcg	gtc	gtc	ctg	atc	gtg	ttt	gcg	2208	
Met	Leu	Met	Ile	Leu	Val	Ile	Val	Ala	Val	Val	Leu	Ile	Val	Phe	Ala		
				725					730					735			
cta	aac	cgg	cgc	acc	aac	gcc	atc	gcc	cag	gcc	ccc	atc	agg	atg	atc	2256	
Leu	Asn	Arg	Arg	Thr	Asn	Ala	Ile	Ala	Gln	Ala	Pro	Ile	Arg	Met	Ile		
			740					745					750				
tac	ccc	gac	ata	gac	aaa	atg	cag	ccc	tct	ggc	ggg	aaa	gtc	gac	cag	2304	
Tyr	Pro	Asp	Ile	Asp	Lys	Met	Gln	Pro	Ser	Gly	Gly	Lys	Val	Asp	Gln		

755	760	765	
gag cag att aaa aac att ctc gcc ggc atg cac cag cta cag cag gaa			2352
Glu Gln Ile Lys Asn Ile Leu Ala Gly Met His Gln Leu Gln Gln Glu			
770	775	780	
gag cgt agg cgg tta gac gaa cag cag agg tca gcg ccc tcg ctt ttc			2400
Glu Arg Arg Arg Leu Asp Glu Gln Gln Arg Ser Ala Pro Ser Leu Phe			
785	790	795	800
cgg cgc gcg tca gac gga cta aaa cgt cgc ttt agg gga tat aaa ccg			2448
Arg Arg Ala Ser Asp Gly Leu Lys Arg Arg Phe Arg Gly Tyr Lys Pro			
	805	810	815
ctg gaa aac gaa gag gct caa gag tat gaa atg agc aaa taa			2490
Leu Glu Asn Glu Glu Ala Gln Glu Tyr Glu Met Ser Lys			
	820	825	830

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 <213> Macaca mulatta rhadinovirus 17577

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Gly Ala Thr Thr Thr Ala Lys Pro Thr Pro Gly Pro Ser Thr Pro Thr			
	35	40	45
Pro Pro Glu Asn Pro Pro Arg Ala Glu Ala Phe Lys Phe Arg Val Cys			
	50	55	60
Ser Ala Ser Ala Thr Gly Glu Leu Phe Arg Phe Asn Leu Glu Lys Thr			
	65	70	75
Cys Pro Gly Thr Glu Asp Lys Thr His Gln Glu Gly Ile Leu Met Val			
	85	90	95
Phe Lys Lys Asn Ile Val Pro His Ile Phe Lys Val Arg Arg Tyr Arg			
	100	105	110
Lys Val Ala Thr Ser Val Thr Val Tyr Arg Gly Trp Thr Glu Thr Ala			
	115	120	125
Val Thr Gly Lys Gln Glu Val Ile Arg Pro Val Pro Gln Tyr Glu Ile			
	130	135	140
Asn His Met Asp Thr Thr Tyr Gln Cys Phe Ser Ser Met Arg Val Asn			
	145	150	155
Val Asn Gly Ile Val Asn Thr Tyr Thr Asp Arg Asp Phe Thr Asn Gln			
	165	170	175
Thr Val Phe Leu Gln Pro Val Glu Gly Leu Thr Asp Asn Ile Gln Arg			
	180	185	190
Tyr Phe Ser Gln Pro Val Leu Tyr Thr Thr Pro Gly Trp Phe Pro Gly			
	195	200	205
Ile Tyr Arg Val Arg Thr Thr Val Asn Cys Glu Ile Val Asp Met Ile			
	210	215	220
Ala Arg Ser Ala Glu Pro Tyr Ser Tyr Phe Val Thr Ala Leu Gly Asp			
	225	230	235
Thr Val Glu Val Ser Pro Phe Cys His Asn Asp Ser Thr Cys Ser Val			
	245	250	255
Ala Glu Lys Thr Glu Asn Gly Leu Gly Ala Arg Val Leu Thr Asn Tyr			
	260	265	270
Thr Ile Val Asp Phe Ala Thr Arg Gln Pro Thr Thr Glu Thr Arg Val			
	275	280	285

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Phe Ala Asp Ser Gly Glu Tyr Thr Val Ser Trp Lys Ala Glu Asp Pro
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Lys Ser Ala Val Cys Ala Leu Thr Leu Trp Lys Thr Phe Pro Arg Ala
305                310                315                320
Ile Gln Thr Thr His Glu Ala Ser Tyr His Phe Val Ala Asn Asp Val
                325                330                335
Thr Ala Thr Phe Thr Ser Pro Leu Ser Gln Val Thr Asn Phe Thr Gly
                340                345                350
Thr Tyr Pro Cys Leu Asn Asp Val Ile Gln Lys Thr Leu Asn Ala Thr
                355                360                365
Ile Lys Lys Leu Ser Asp Thr His Ala Thr Asn Gly Ser Glu Gln Tyr
                370                375                380
Tyr Glu Thr Glu Gly Gly Leu Phe Leu Leu Trp Gln Pro Leu Thr Pro
385                390                395                400
Leu Ser Leu Ala Asp Glu Met Arg Glu Leu Asn Gly Thr Thr Pro Ala
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Pro Pro Thr Thr Thr Ser Thr Ala Asn Arg Val Arg Arg Ser Val Gly
                420                425                430
Thr Asn Glu Gln Ala Thr Asp Asp Leu Ala Ala Pro Gln Leu Gln Phe
                435                440                445
Ala Tyr Asp Lys Leu Arg Ala Ser Ile Asn Lys Val Leu Glu Glu Leu
                450                455                460
Ser Arg Ala Trp Cys Arg Glu Gln Val Arg Asp Thr Tyr Met Trp Tyr
465                470                475                480
Glu Leu Ser Lys Ile Asn Pro Thr Ser Val Met Thr Ala Ile Tyr Gly
                485                490                495
Arg Pro Val Ser Ala Lys Phe Val Gly Asp Ala Ile Ser Val Thr Asp
                500                505                510
Cys Val Ala Val Asp Gln Ala Ser Val Ser Ile His Lys Ser Leu Arg
                515                520                525
Thr Ser Thr Pro Gly Ile Cys Tyr Ser Arg Pro Pro Val Thr Phe Arg
                530                535                540
Phe Leu Asn Ser Thr Thr Leu Phe Lys Gly Gln Leu Gly Pro Arg Asn
545                550                555                560
Glu Ile Ile Leu Thr Asp Asn Gln Val Glu Ala Cys Lys Glu Thr Cys
                565                570                575
Glu His Tyr Phe Ile Ala Ser Asn Val Thr Tyr Tyr Tyr Lys Asp Tyr
                580                585                590
Val Phe Val Lys Lys Ile Asn Thr Ser Glu Ile Ser Thr Leu Gly Thr
                595                600                605
Phe Ile Ala Leu Asn Leu Ser Phe Ile Glu Asn Ile Asp Phe Arg Val
                610                615                620
Ile Glu Leu Tyr Ser Arg Ala Glu Lys Lys Leu Ser Gly Ser Val Phe
625                630                635                640
Asp Ile Glu Thr Met Phe Arg Glu Tyr Asn Tyr Tyr Thr Gln Arg Leu
                645                650                655
Ala Gly Leu Arg Glu Asp Leu Asp Asn Thr Ile Asp Leu Asn Arg Asp
                660                665                670
Arg Leu Ala Arg Asp Leu Ser Glu Ile Val Ala Asp Leu Gly Asp Val
                675                680                685
Gly Arg Thr Val Val Asn Val Ala Ser Ser Val Ile Thr Leu Phe Gly
                690                695                700
Ser Ile Val Ser Gly Phe Ile Asn Phe Ile Lys Ser Pro Phe Gly Gly
705                710                715                720
Met Leu Met Ile Leu Val Ile Val Ala Val Val Leu Ile Val Phe Ala
                725                730                735
Leu Asn Arg Arg Thr Asn Ala Ile Ala Gln Ala Pro Ile Arg Met Ile
                740                745                750
Tyr Pro Asp Ile Asp Lys Met Gln Pro Ser Gly Gly Lys Val Asp Gln
                755                760                765
Glu Gln Ile Lys Asn Ile Leu Ala Gly Met His Gln Leu Gln Gln Glu

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      770              775              780
Glu Arg Arg Arg Leu Asp Glu Gln Gln Arg Ser Ala Pro Ser Leu Phe
785              790              795              800
Arg Arg Ala Ser Asp Gly Leu Lys Arg Arg Phe Arg Gly Tyr Lys Pro
      805              810              815
Leu Glu Asn Glu Glu Ala Gln Glu Tyr Glu Met Ser Lys
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tca cac aga ggc acc gat gct ccc gcc cct gcc ggc gcc gga gcc gtt 96
Ser His Arg Gly Thr Asp Ala Pro Ala Pro Ala Gly Ala Gly Ala Val
      20              25              30

cag ccg cca cca gac gtt tgc agg ctc atc ccc gcc tgc ctc cga acg 144
Gln Pro Pro Asp Val Cys Arg Leu Ile Pro Ala Cys Leu Arg Thr
      35              40              45

cca ggg gca ggc ggg atg atc ccg gtc acg atc ccg ttc ccg cca acg 192
Pro Gly Ala Gly Gly Met Ile Pro Val Thr Ile Pro Phe Pro Pro Thr
      50              55              60

tac ttc gag aac ggt gct cgc gga gac gtg ctg ctc gcc aac gaa cgg 240
Tyr Phe Glu Asn Gly Ala Arg Gly Asp Val Leu Leu Ala Asn Glu Arg
      65              70              75              80

tcc atg tgg acg gcg cgc gac cgc aag ccc gtc gcc ccg gac ccc caa 288
Ser Met Trp Thr Ala Arg Asp Arg Lys Pro Val Ala Pro Asp Pro Gln
      85              90              95

gac caa tcc atc acg ttt cac gcg tac gac gtc gtt gaa aca acg tac 336
Asp Gln Ser Ile Thr Phe His Ala Tyr Asp Val Val Glu Thr Thr Tyr
      100              105              110

gcg gcg gac agg tgt gcc gag gta cct agc cgc ttc caa acg gac att 384
Ala Ala Asp Arg Cys Ala Glu Val Pro Ser Arg Phe Gln Thr Asp Ile
      115              120              125

atc cca agc gga acc gtg ctc aag ctc ctg ggg cga acc gag gac ggc 432
Ile Pro Ser Gly Thr Val Leu Lys Leu Leu Gly Arg Thr Glu Asp Gly
      130              135              140

acc agc gtg tgc gtg aac gtg ttc cgt caa cag gta tat ttc tac gcg 480
Thr Ser Val Cys Val Asn Val Phe Arg Gln Gln Val Tyr Phe Tyr Ala
      145              150              155              160

aag gtt cca gcc ggc att aac gtc acc cac atc ctc cag cag gcc ctc 528

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Lys	Val	Pro	Ala	Gly	Ile	Asn	Val	Thr	His	Ile	Leu	Gln	Gln	Ala	Leu		
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aag	aac	aca	gcc	ggc	cgt	gcc	gcg	tgc	ggc	ttc	tcg	acc	aga	aga	gtg	576	
Lys	Asn	Thr	Ala	Gly	Arg	Ala	Ala	Cys	Gly	Phe	Ser	Thr	Arg	Arg	Val		
			180					185					190				
aac	aaa	aga	att	ctc	aaa	acg	tac	gac	gtc	gcg	gag	cat	ccc	gtc	acg	624	
Asn	Lys	Arg	Ile	Leu	Lys	Thr	Tyr	Asp	Val	Ala	Glu	His	Pro	Val	Thr		
			195				200					205					
gaa	atc	acg	cta	tcg	tcc	ggg	tcc	atg	ctc	tcg	acc	ctc	agc	gac	cgc	672	
Glu	Ile	Thr	Leu	Ser	Ser	Gly	Ser	Met	Leu	Ser	Thr	Leu	Ser	Asp	Arg		
	210					215					220						
ctc	gtc	gcg	tgc	ggg	tgc	gag	gtg	ttc	gag	tca	aac	gtg	gac	gcc	gtt	720	
Leu	Val	Ala	Cys	Gly	Cys	Glu	Val	Phe	Glu	Ser	Asn	Val	Asp	Ala	Val		
	225				230					235					240		
cgc	cgg	ttc	gtt	ctg	gat	cac	ggg	ttt	acc	acg	ttc	ggg	tgg	tac	tcg	768	
Arg	Arg	Phe	Val	Leu	Asp	His	Gly	Phe	Thr	Thr	Phe	Gly	Trp	Tyr	Ser		
				245					250					255			
tgc	gcg	cgc	gcc	acg	ccc	cgc	ctg	gcg	gcc	aga	gat	gcc	agg	acg	gcc	816	
Cys	Ala	Arg	Ala	Thr	Pro	Arg	Leu	Ala	Ala	Arg	Asp	Ala	Arg	Thr	Ala		
			260					265					270				
ctg	gag	ttt	gac	tgc	agc	tgg	gag	gac	ctc	agc	gtt	caa	gcg	gac	cgc	864	
Leu	Glu	Phe	Asp	Cys	Ser	Trp	Glu	Asp	Leu	Ser	Val	Gln	Ala	Asp	Arg		
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agc	gac	tgg	ccc	ccg	tac	cgc	atc	gtg	gcc	ttt	gat	atc	gag	tgc	act	912	
Ser	Asp	Trp	Pro	Pro	Tyr	Arg	Ile	Val	Ala	Phe	Asp	Ile	Glu	Cys	Thr		
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gga	gag	gcg	gga	ttt	ccg	tgc	gcc	acg	cgc	gac	ggc	gac	gcg	gtg	atc	960	
Gly	Glu	Ala	Gly	Phe	Pro	Cys	Ala	Thr	Arg	Asp	Gly	Asp	Ala	Val	Ile		
	305				310					315				320			
cag	atc	tcc	tgc	gtc	ttc	tac	acg	acc	agg	gaa	ggc	gcg	ccc	aat	ccg	1008	
Gln	Ile	Ser	Cys	Val	Phe	Tyr	Thr	Thr	Arg	Glu	Gly	Ala	Pro	Asn	Pro		
				325					330					335			
cca	aac	ata	ctg	ttc	agc	gtc	ggg	acg	tgc	gac	ccc	atc	ccg	gac	acc	1056	
Pro	Asn	Ile	Leu	Phe	Ser	Val	Gly	Thr	Cys	Asp	Pro	Ile	Pro	Asp	Thr		
			340					345					350				
gac	gtt	ttg	gag	ttt	ccg	tcg	gaa	tat	gac	atg	ctg	gtg	tcg	ttc	ttc	1104	
Asp	Val	Leu	Glu	Phe	Pro	Ser	Glu	Tyr	Asp	Met	Leu	Val	Ser	Phe	Phe		
		355					360					365					
gcc	atg	atc	cgc	gac	ttc	gag	gtg	gac	ttt	tta	acc	ggc	tat	aac	atc	1152	
Ala	Met	Ile	Arg	Asp	Phe	Glu	Val	Asp	Phe	Leu	Thr	Gly	Tyr	Asn	Ile		
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Ser	Asn	Phe	Asp	Leu	Pro	Tyr	Leu	Ile	Thr	Arg	Ala	Ser	Gln	Val	Tyr		
	385				390					395				400			
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Asn	Leu	Arg	Leu	Asn	Glu	Tyr	Thr	Lys	Ile	Lys	Thr	Gly	Ser	Ile	Phe		

405										410										415										
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Glu Val His Glu Pro Arg Gly Gly Gly Gly Gly Phe Met Arg Ser Val																														
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Cys Arg Glu Lys Leu Ser Leu Ser Asp Tyr Lys Leu Asp Thr Val Ala																														
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Pro Pro Leu Phe Arg Ser Gly Pro Gly Gly Arg Ala Lys Val Gly Ser																														
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Tyr Cys Val Met Asp Ser Val Leu Val Met Asp Leu Leu Lys Met Phe																														
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Met Ile His Val Glu Ile Ser Glu Ile Ala Lys Leu Ala Lys Ile Gln																														
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gcc agg cgc gtc ctg acg gac ggc caa cag ctc cgc gtg ttc tcc tgc	1632																													
Ala Arg Arg Val Leu Thr Asp Gly Gln Gln Leu Arg Val Phe Ser Cys																														
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ccc gag gga cag ggg ggc tat cag ggc gcg acg gtg atc aac ccc att	1728																													
Pro Glu Gly Gln Gly Tyr Gln Gly Ala Thr Val Ile Asn Pro Ile																														
565 570 575																														
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Pro Gly Phe Tyr Asp Glu Pro Val Leu Val Val Asp Phe Ala Ser Leu																														
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Tyr Pro Ser Ile Ile Gln Ala His Asn Leu Cys Tyr Ser Thr Met Ile																														
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His Gly Arg Asp Leu His Leu His Pro Asn Leu Thr Pro Asp Asp Tyr																														
610 615 620																														
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Glu Thr Phe Val Leu Ser Gly Gly Pro Val His Phe Val Lys Lys His																														
625 630 635 640																														
aag cgg gag tct ctg ctg gga aga ctg cta acc gtg tgg tta gaa aag	1968																													
Lys Arg Glu Ser Leu Leu Gly Arg Leu Leu Thr Val Trp Leu Glu Lys																														
645 650 655																														

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aaa acc atc tta gat aaa caa cag ctg gcc atc aag gtg aca tgt aac	2064
Lys Thr Ile Leu Asp Lys Gln Gln Leu Ala Ile Lys Val Thr Cys Asn	
675 680 685	
gcg gtt tac ggg ttc acc ggg gtg gcc agc ggc ctc ctc cca tgc att	2112
Ala Val Tyr Gly Phe Thr Gly Val Ala Ser Gly Leu Leu Pro Cys Ile	
690 695 700	
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Asn Ile Ala Glu Thr Val Thr Leu Arg Gly Arg Thr Met Leu Glu Met	
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Ser Lys Ser Tyr Val Glu Ala Leu Thr Thr Glu Asp Leu Arg Thr Arg	
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Leu Gly Arg Glu Val Thr Ala Arg His Gly Ala Arg Phe Arg Val Val	
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Tyr Gly Asp Thr Asp Ser Leu Phe Ile Ala Cys Asp Gly Tyr Ser Ala	
755 760 765	
gaa gcc gtt tcc gct ttc tgt gac gat ctg gcc gcc agg atc act gcg	2352
Glu Ala Val Ser Ala Phe Cys Asp Asp Leu Ala Ala Arg Ile Thr Ala	
770 775 780	
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785 790 795 800	
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Cys Leu Leu Leu Leu Thr Lys Lys Arg Tyr Ile Gly Val Leu Leu Asn	
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Asp Lys Met Val Met Lys Gly Val Asp Leu Ile Arg Lys Thr Ala Cys	
820 825 830	
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Lys Phe Val Gln Glu Arg Cys Arg Ala Ile Leu Asp Leu Val Leu His	
835 840 845	
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Asp Pro Glu Val Lys Ala Ala Ala Arg Leu Leu Cys Lys Arg Pro Pro	
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His Ala Val Tyr Glu Glu Gly Leu Pro Ala Gly Phe Ile Lys Ile Val	
865 870 875 880	
gag gtc ctc aac gcg agc tat ctg gac ctc cga aac agc gtc gtg ccc	2688
Glu Val Leu Asn Ala Ser Tyr Leu Asp Leu Arg Asn Ser Val Val Pro	
885 890 895	

atc gag cag tta acg ttc tcc acc gag ctc agc cgc ccc gtc tgc gat 2736  
 Ile Glu Gln Leu Thr Phe Ser Thr Glu Leu Ser Arg Pro Val Cys Asp  
 900 905 910

tac aag acc acc aac ctg ccc cac ctg gcg gtg tac caa aag ctg gcg 2784  
 Tyr Lys Thr Thr Asn Leu Pro His Leu Ala Val Tyr Gln Lys Leu Ala  
 915 920 925

agc agg tgc gag gag ctg ccc cag gtg cac gat aga atc ccc tac gtg 2832  
 Ser Arg Cys Glu Glu Leu Pro Gln Val His Asp Arg Ile Pro Tyr Val  
 930 935 940

ttc gtt gac gcg ccc ggg tcc cta aag tcg gac ctg gcc gaa cac ccg 2880  
 Phe Val Asp Ala Pro Gly Ser Leu Lys Ser Asp Leu Ala Glu His Pro  
 945 950 955 960

gat tac gtc aga cag cac cag att ccc gtc gcg gtc gac cta tat ttc 2928  
 Asp Tyr Val Arg Gln His Gln Ile Pro Val Ala Val Asp Leu Tyr Phe  
 965 970 975

gac aaa ctg gtg cac ggc gcg gcc aac atc ctc cag tgt ctg ttc ggc 2976  
 Asp Lys Leu Val His Gly Ala Ala Asn Ile Leu Gln Cys Leu Phe Gly  
 980 985 990

aac aac gcg gac acc acg gtg gcc atc ctc tac aat ttt ctc aac gtc 3024  
 Asn Asn Ala Asp Thr Thr Val Ala Ile Leu Tyr Asn Phe Leu Asn Val  
 995 1000 1005

ccg tat aag ctg ttc tcg tga 3045  
 Pro Tyr Lys Leu Phe Ser  
 1010 1015

<210> 15  
 <211> 1014  
 <212> PRT  
 <213> Macaca mulatta rhadinovirus 17577

<400> 15  
 Met Asp Phe Phe Asn Pro Tyr Leu Gly Pro Arg Gly Pro Arg Pro His  
 1 5 10 15  
 Ser His Arg Gly Thr Asp Ala Pro Ala Pro Ala Gly Ala Gly Ala Val  
 20 25 30  
 Gln Pro Pro Pro Asp Val Cys Arg Leu Ile Pro Ala Cys Leu Arg Thr  
 35 40 45  
 Pro Gly Ala Gly Gly Met Ile Pro Val Thr Ile Pro Phe Pro Pro Thr  
 50 55 60  
 Tyr Phe Glu Asn Gly Ala Arg Gly Asp Val Leu Leu Ala Asn Glu Arg  
 65 70 75 80  
 Ser Met Trp Thr Ala Arg Asp Arg Lys Pro Val Ala Pro Asp Pro Gln  
 85 90 95  
 Asp Gln Ser Ile Thr Phe His Ala Tyr Asp Val Val Glu Thr Thr Tyr  
 100 105 110  
 Ala Ala Asp Arg Cys Ala Glu Val Pro Ser Arg Phe Gln Thr Asp Ile  
 115 120 125  
 Ile Pro Ser Gly Thr Val Leu Lys Leu Leu Gly Arg Thr Glu Asp Gly  
 130 135 140  
 Thr Ser Val Cys Val Asn Val Phe Arg Gln Gln Val Tyr Phe Tyr Ala  
 145 150 155 160  
 Lys Val Pro Ala Gly Ile Asn Val Thr His Ile Leu Gln Gln Ala Leu  
 165 170 175

Lys	Asn	Thr	Ala	Gly	Arg	Ala	Ala	Cys	Gly	Phe	Ser	Thr	Arg	Arg	Val
			180					185					190		
Asn	Lys	Arg	Ile	Leu	Lys	Thr	Tyr	Asp	Val	Ala	Glu	His	Pro	Val	Thr
		195					200					205			
Glu	Ile	Thr	Leu	Ser	Ser	Gly	Ser	Met	Leu	Ser	Thr	Leu	Ser	Asp	Arg
	210					215					220				
Leu	Val	Ala	Cys	Gly	Cys	Glu	Val	Phe	Glu	Ser	Asn	Val	Asp	Ala	Val
225					230					235				240	
Arg	Arg	Phe	Val	Leu	Asp	His	Gly	Phe	Thr	Thr	Phe	Gly	Trp	Tyr	Ser
			245						250					255	
Cys	Ala	Arg	Ala	Thr	Pro	Arg	Leu	Ala	Ala	Arg	Asp	Ala	Arg	Thr	Ala
			260					265					270		
Leu	Glu	Phe	Asp	Cys	Ser	Trp	Glu	Asp	Leu	Ser	Val	Gln	Ala	Asp	Arg
		275					280					285			
Ser	Asp	Trp	Pro	Pro	Tyr	Arg	Ile	Val	Ala	Phe	Asp	Ile	Glu	Cys	Thr
	290					295					300				
Gly	Glu	Ala	Gly	Phe	Pro	Cys	Ala	Thr	Arg	Asp	Gly	Asp	Ala	Val	Ile
305					310					315				320	
Gln	Ile	Ser	Cys	Val	Phe	Tyr	Thr	Thr	Arg	Glu	Gly	Ala	Pro	Asn	Pro
				325						330				335	
Pro	Asn	Ile	Leu	Phe	Ser	Val	Gly	Thr	Cys	Asp	Pro	Ile	Pro	Asp	Thr
			340					345					350		
Asp	Val	Leu	Glu	Phe	Pro	Ser	Glu	Tyr	Asp	Met	Leu	Val	Ser	Phe	Phe
		355					360					365			
Ala	Met	Ile	Arg	Asp	Phe	Glu	Val	Asp	Phe	Leu	Thr	Gly	Tyr	Asn	Ile
	370					375					380				
Ser	Asn	Phe	Asp	Leu	Pro	Tyr	Leu	Ile	Thr	Arg	Ala	Ser	Gln	Val	Tyr
385					390					395				400	
Asn	Leu	Arg	Leu	Asn	Glu	Tyr	Thr	Lys	Ile	Lys	Thr	Gly	Ser	Ile	Phe
				405					410					415	
Glu	Val	His	Glu	Pro	Arg	Gly	Gly	Gly	Gly	Gly	Phe	Met	Arg	Ser	Val
			420				425						430		
Ser	Lys	Ile	Lys	Ile	Ala	Gly	Ile	Val	Pro	Ile	Asp	Met	Tyr	Gln	Val
		435				440					445				
Cys	Arg	Glu	Lys	Leu	Ser	Leu	Ser	Asp	Tyr	Lys	Leu	Asp	Thr	Val	Ala
	450					455					460				
Arg	Gln	Cys	Leu	Gly	Gly	Lys	Lys	Glu	Asp	Val	Ser	Tyr	Lys	Asp	Ile
465				470						475				480	
Pro	Pro	Leu	Phe	Arg	Ser	Gly	Pro	Gly	Gly	Arg	Ala	Lys	Val	Gly	Ser
			485						490					495	
Tyr	Cys	Val	Met	Asp	Ser	Val	Leu	Val	Met	Asp	Leu	Leu	Lys	Met	Phe
			500					505					510		
Met	Ile	His	Val	Glu	Ile	Ser	Glu	Ile	Ala	Lys	Leu	Ala	Lys	Ile	Gln
		515					520					525			
Ala	Arg	Arg	Val	Leu	Thr	Asp	Gly	Gln	Gln	Leu	Arg	Val	Phe	Ser	Cys
	530					535					540				
Leu	Leu	Glu	Ala	Ala	Ala	Arg	Glu	Asn	Phe	Ile	Leu	Pro	Val	Pro	Thr
545					550						555				560
Pro	Glu	Gly	Gln	Gly	Gly	Tyr	Gln	Gly	Ala	Thr	Val	Ile	Asn	Pro	Ile
				565					570					575	
Pro	Gly	Phe	Tyr	Asp	Glu	Pro	Val	Leu	Val	Val	Asp	Phe	Ala	Ser	Leu
			580					585					590		
Tyr	Pro	Ser	Ile	Ile	Gln	Ala	His	Asn	Leu	Cys	Tyr	Ser	Thr	Met	Ile
		595					600					605			
His	Gly	Arg	Asp	Leu	His	Leu	His	Pro	Asn	Leu	Thr	Pro	Asp	Asp	Tyr
	610					615					620				
Glu	Thr	Phe	Val	Leu	Ser	Gly	Gly	Pro	Val	His	Phe	Val	Lys	Lys	His
625					630						635				640
Lys	Arg	Glu	Ser	Leu	Leu	Gly	Arg	Leu	Leu	Thr	Val	Trp	Leu	Glu	Lys
				645					650					655	
Arg	Arg	Ala	Ile	Arg	Arg	Thr	Leu	Ala	Cys	Asp	Asp	Pro	Ser	Leu	

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        660                665                670
Lys Thr Ile Leu Asp Lys Gln Gln Leu Ala Ile Lys Val Thr Cys Asn
        675                680                685
Ala Val Tyr Gly Phe Thr Gly Val Ala Ser Gly Leu Leu Pro Cys Ile
        690                695                700
Asn Ile Ala Glu Thr Val Thr Leu Arg Gly Arg Thr Met Leu Glu Met
705                710                715                720
Ser Lys Ser Tyr Val Glu Ala Leu Thr Thr Glu Asp Leu Arg Thr Arg
        725                730                735
Leu Gly Arg Glu Val Thr Ala Arg His Gly Ala Arg Phe Arg Val Val
        740                745                750
Tyr Gly Asp Thr Asp Ser Leu Phe Ile Ala Cys Asp Gly Tyr Ser Ala
        755                760                765
Glu Ala Val Ser Ala Phe Cys Asp Asp Leu Ala Ala Arg Ile Thr Ala
        770                775                780
Asp Leu Phe Pro Pro Pro Ile Lys Leu Glu Ala Glu Lys Thr Phe Lys
785                790                795                800
Cys Leu Leu Leu Leu Thr Lys Lys Arg Tyr Ile Gly Val Leu Leu Asn
        805                810                815
Asp Lys Met Val Met Lys Gly Val Asp Leu Ile Arg Lys Thr Ala Cys
        820                825                830
Lys Phe Val Gln Glu Arg Cys Arg Ala Ile Leu Asp Leu Val Leu His
        835                840                845
Asp Pro Glu Val Lys Ala Ala Arg Leu Leu Cys Lys Arg Pro Pro
        850                855                860
His Ala Val Tyr Glu Glu Gly Leu Pro Ala Gly Phe Ile Lys Ile Val
865                870                875                880
Glu Val Leu Asn Ala Ser Tyr Leu Asp Leu Arg Asn Ser Val Val Pro
        885                890                895
Ile Glu Gln Leu Thr Phe Ser Thr Glu Leu Ser Arg Pro Val Cys Asp
        900                905                910
Tyr Lys Thr Thr Asn Leu Pro His Leu Ala Val Tyr Gln Lys Leu Ala
        915                920                925
Ser Arg Cys Glu Glu Leu Pro Gln Val His Asp Arg Ile Pro Tyr Val
        930                935                940
Phe Val Asp Ala Pro Gly Ser Leu Lys Ser Asp Leu Ala Glu His Pro
945                950                955                960
Asp Tyr Val Arg Gln His Gln Ile Pro Val Ala Val Asp Leu Tyr Phe
        965                970                975
Asp Lys Leu Val His Gly Ala Ala Asn Ile Leu Gln Cys Leu Phe Gly
        980                985                990
Asn Asn Ala Asp Thr Thr Val Ala Ile Leu Tyr Asn Phe Leu Asn Val
        995                1000                1005
Pro Tyr Lys Leu Phe Ser
1010

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```

<210> 16
<211> 1251
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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<220>
<221> CDS
<222> (1) .. (1251)

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<400> 16
atg ctg gtt aac gaa ctg tcg gtg gtc ctc ggc gac tgg gag gtg act 48
Met Leu Val Asn Glu Leu Ser Val Val Leu Gly Asp Trp Glu Val Thr
1 5 10 15

```

ttt cac cgg ggt aga ttc agc ttc gtc aac ctc acc cgc ctg caa acg	96
Phe His Arg Gly Arg Phe Ser Phe Val Asn Leu Thr Arg Leu Gln Thr	
20 25 30	
ttc aag ggc cac ggg ggc tac gcc agg gtc cga ctc ccc ttc tcg ctc	144
Phe Lys Gly His Gly Gly Tyr Ala Arg Val Arg Leu Pro Phe Ser Leu	
35 40 45	
gac cag tta ctc cac caa cat ttc gcg ttc gga ctc gtg acg cgt ctc	192
Asp Gln Leu Leu His Gln His Phe Ala Phe Gly Leu Val Thr Arg Leu	
50 55 60	
aag gaa ctg ccc ccc ttc tcc gac tgc gtg gcc ctt atc gcc ccg ttg	240
Lys Glu Leu Pro Pro Phe Ser Asp Cys Val Ala Leu Ile Ala Pro Leu	
65 70 75 80	
gat tcc ggc ggc gac gcg gac gcg gcg cgc gtg gcc ccc ggg ttc gtg	288
Asp Ser Gly Gly Asp Ala Asp Ala Ala Arg Val Ala Pro Gly Phe Val	
85 90 95	
ctg gac tcc tct cgc ccg ctg acc gtg tgg gta aac gcg agc ggg cgg	336
Leu Asp Ser Ser Arg Pro Leu Thr Val Trp Val Asn Ala Ser Gly Arg	
100 105 110	
cac acg atc cgg ttc tgc ctc ctc ttt cta aag ccg atc gac ctg gag	384
His Thr Ile Arg Phe Cys Leu Leu Phe Leu Lys Pro Ile Asp Leu Glu	
115 120 125	
cgc gcg gtc acg tac gtc ttc ggc gag aac ggc ggc gcg cgc tcg gag	432
Arg Ala Val Thr Tyr Val Phe Gly Glu Asn Gly Gly Ala Arg Ser Glu	
130 135 140	
ggc acc cca aag ccc acc tgc gcg acc gaa agc ctg ccc ggt gga ccc	480
Gly Thr Pro Lys Pro Thr Cys Ala Thr Glu Ser Leu Pro Gly Gly Pro	
145 150 155 160	
ctg cgc gtc tcc ggc gag gcg tct cag acg tcg ccc cat tct ttc gtt	528
Leu Arg Val Ser Gly Glu Ala Ser Gln Thr Ser Pro His Ser Phe Val	
165 170 175	
gcg tat ttt ccc acg gcc aac tcg gtg gcc tgc cta agc ctg ttg cgg	576
Ala Tyr Phe Pro Thr Ala Asn Ser Val Ala Cys Leu Ser Leu Leu Arg	
180 185 190	
tta cag gtg agg ccg ttt tcg gat gac gcg gcg cac agg gac gcg cgg	624
Leu Gln Val Arg Pro Phe Ser Asp Asp Ala Ala His Arg Asp Ala Arg	
195 200 205	
atc tcc ccg aaa tac gtc acg ttt agt aac tcc ggg ggt aac gtc tgc	672
Ile Ser Pro Lys Tyr Val Thr Phe Ser Asn Ser Gly Gly Asn Val Cys	
210 215 220	
aag gcg tcc gtt cac acg ctg tcc ccg tcg cgg tgt aaa acg gcg caa	720
Lys Ala Ser Val His Thr Leu Ser Pro Ser Arg Cys Lys Thr Ala Gln	
225 230 235 240	
atg gaa atc atc tac gct ccc ggg gac ccc aac gcc gag ata gtc ctg	768
Met Glu Ile Ile Tyr Ala Pro Gly Asp Pro Asn Ala Glu Ile Val Leu	
245 250 255	



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ggc cag tcc gga ccc gtc ctg ccc acc cac acc ggc ggc cgc gta ttg 816
Gly Gln Ser Gly Pro Val Leu Pro Thr His Thr Gly Gly Arg Val Leu
260 265 270

ggg gtc tac gcc gac gcc gaa aaa acc atc caa cct gga agc tcc gcg 864
Gly Val Tyr Ala Asp Ala Glu Lys Thr Ile Gln Pro Gly Ser Ser Ala
275 280 285

gaa gtc cgg gtt cag tta atc ttc caa cag gga gcg gcc gct cgg ggc 912
Glu Val Arg Val Gln Leu Ile Phe Gln Gln Gly Ala Ala Ala Arg Gly
290 295 300

gat ctg gcg ttt ctg gtc acg ggc gtg gca ccg gag ccc cta ttc gtc 960
Asp Leu Ala Phe Leu Val Thr Gly Val Ala Pro Glu Pro Leu Phe Val
305 310 315 320

gtc acc ccg gca ctc ttg ctt tcc ggt tgc aca acc cac ctg cgc cta 1008
Val Thr Pro Ala Leu Leu Ser Gly Cys Thr Thr His Leu Arg Leu
325 330 335

ttc aac ccc aac ggt acc ccc acg act ata aaa aga gac acc ctt gtg 1056
Phe Asn Pro Asn Gly Thr Pro Thr Thr Ile Lys Arg Asp Thr Leu Val
340 345 350

gcc gcc gcc gcg ccc tgc ccc gtg gtg cga tta agc tcc gcc gac gac 1104
Ala Ala Ala Ala Pro Cys Pro Val Val Arg Leu Ser Ser Ala Asp Asp
355 360 365

gcg ccg cga gac ctc gtc gcg tca cca gac acc ggg gcg ctc tcc att 1152
Ala Pro Arg Asp Leu Val Ala Ser Pro Asp Thr Gly Ala Leu Ser Ile
370 375 380

aac gcg ttc aca atc ccg gtc ggt ttc cca ggg gtg gtc tcg gcg gag 1200
Asn Ala Phe Thr Ile Pro Val Gly Phe Pro Gly Val Val Ser Ala Glu
385 390 395 400

tgt cac gtg tcc cta cgc gac aac ggg gtc cac gaa cgc atg aac cat 1248
Cys His Val Ser Leu Arg Asp Asn Gly Val His Glu Arg Met Asn His
405 410 415

tga 1251

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<210> 17
<211> 416
<212> PRT
<213> Macaca mulatta rhadinovirus 17577

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<400> 17
Met Leu Val Asn Glu Leu Ser Val Val Leu Gly Asp Trp Glu Val Thr
1 5 10 15
Phe His Arg Gly Arg Phe Ser Phe Val Asn Leu Thr Arg Leu Gln Thr
20 25 30
Phe Lys Gly His Gly Gly Tyr Ala Arg Val Arg Leu Pro Phe Ser Leu
35 40 45
Asp Gln Leu Leu His Gln His Phe Ala Phe Gly Leu Val Thr Arg Leu
50 55 60
Lys Glu Leu Pro Pro Phe Ser Asp Cys Val Ala Leu Ile Ala Pro Leu
65 70 75 80
Asp Ser Gly Gly Asp Ala Asp Ala Ala Arg Val Ala Pro Gly Phe Val

```

					85					90					95	
Leu	Asp	Ser	Ser	Arg	Pro	Leu	Thr	Val	Trp	Val	Asn	Ala	Ser	Gly	Arg	
			100					105						110		
His	Thr	Ile	Arg	Phe	Cys	Leu	Leu	Phe	Leu	Lys	Pro	Ile	Asp	Leu	Glu	
		115				120						125				
Arg	Ala	Val	Thr	Tyr	Val	Phe	Gly	Glu	Asn	Gly	Gly	Ala	Arg	Ser	Glu	
		130				135					140					
Gly	Thr	Pro	Lys	Pro	Thr	Cys	Ala	Thr	Glu	Ser	Leu	Pro	Gly	Gly	Pro	
145					150					155						160
Leu	Arg	Val	Ser	Gly	Glu	Ala	Ser	Gln	Thr	Ser	Pro	His	Ser	Phe	Val	
				165					170					175		
Ala	Tyr	Phe	Pro	Thr	Ala	Asn	Ser	Val	Ala	Cys	Leu	Ser	Leu	Leu	Arg	
			180					185					190			
Leu	Gln	Val	Arg	Pro	Phe	Ser	Asp	Asp	Ala	Ala	His	Arg	Asp	Ala	Arg	
		195					200					205				
Ile	Ser	Pro	Lys	Tyr	Val	Thr	Phe	Ser	Asn	Ser	Gly	Gly	Asn	Val	Cys	
	210					215					220					
Lys	Ala	Ser	Val	His	Thr	Leu	Ser	Pro	Ser	Arg	Cys	Lys	Thr	Ala	Gln	
225					230					235					240	
Met	Glu	Ile	Ile	Tyr	Ala	Pro	Gly	Asp	Pro	Asn	Ala	Glu	Ile	Val	Leu	
				245				250						255		
Gly	Gln	Ser	Gly	Pro	Val	Leu	Pro	Thr	His	Thr	Gly	Gly	Arg	Val	Leu	
			260					265					270			
Gly	Val	Tyr	Ala	Asp	Ala	Glu	Lys	Thr	Ile	Gln	Pro	Gly	Ser	Ser	Ala	
		275					280					285				
Glu	Val	Arg	Val	Gln	Leu	Ile	Phe	Gln	Gln	Gly	Ala	Ala	Ala	Arg	Gly	
		290				295					300					
Asp	Leu	Ala	Phe	Leu	Val	Thr	Gly	Val	Ala	Pro	Glu	Pro	Leu	Phe	Val	
305					310					315					320	
Val	Thr	Pro	Ala	Leu	Leu	Leu	Ser	Gly	Cys	Thr	Thr	His	Leu	Arg	Leu	
				325					330					335		
Phe	Asn	Pro	Asn	Gly	Thr	Pro	Thr	Thr	Ile	Lys	Arg	Asp	Thr	Leu	Val	
			340					345					350			
Ala	Ala	Ala	Ala	Pro	Cys	Pro	Val	Val	Arg	Leu	Ser	Ser	Ala	Asp	Asp	
			355				360					365				
Ala	Pro	Arg	Asp	Leu	Val	Ala	Ser	Pro	Asp	Thr	Gly	Ala	Leu	Ser	Ile	
						375					380					
Asn	Ala	Phe	Thr	Ile	Pro	Val	Gly	Phe	Pro	Gly	Val	Val	Ser	Ala	Glu	
385					390					395					400	
Cys	His	Val	Ser	Leu	Arg	Asp	Asn	Gly	Val	His	Glu	Arg	Met	Asn	His	
				405					410					415		

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<210> 18
<211> 1230
<212> DNA
<213> Macaca mulatta rhadinovirus 17577
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<220>
<221> CDS
<222> (1) .. (1230)
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<400> 18
atg gga aca ccg gtg cgt ttc ttt cgc ggc gag tgg cag acc tcg agt 48
Met Gly Thr Pro Val Arg Phe Phe Arg Gly Glu Trp Gln Thr Ser Ser
      1              5              10              15

cta gtg gac aac ggc acg cca cgg tac agc tcc ctg gtg tgg gcc gcc 96
Leu Val Asp Asn Gly Thr Pro Arg Tyr Ser Ser Leu Val Trp Ala Ala
      20              25              30

```

act att cac gac ggc tac ctg aca ctg gtg aac agg tca gag ctg tgc	144
Thr Ile His Asp Gly Tyr Leu Thr Leu Val Asn Arg Ser Glu Leu Cys	
35 40 45	
gtc acg gag agg tct ccg tgt ctg ccg gca tgc ccc agc atc ggg aga	192
Val Thr Glu Arg Ser Pro Cys Leu Pro Ala Cys Pro Ser Ile Gly Arg	
50 55 60	
ctg gtc ggg aag agg ttt ccc ggc ttc gcc ttt gcc agc gcc act ctg	240
Leu Val Gly Lys Arg Phe Pro Gly Phe Ala Phe Ala Ser Ala Thr Leu	
65 70 75 80	
ggc gat cgg gga aca cgc acc gtg ttc tac gcg ttc ggt cac cgc gac	288
Gly Asp Arg Gly Thr Arg Thr Val Phe Tyr Ala Phe Gly His Arg Asp	
85 90 95	
aac cca ctg gac ata gta ccc gcc gtg gtc gag cgc gcg gat cgc gag	336
Asn Pro Leu Asp Ile Val Pro Ala Val Val Glu Arg Ala Asp Arg Glu	
100 105 110	
ctg gtg ctg cgg gtt cac gct ccg caa aca acg cgg gtg tcg cga tac	384
Leu Val Leu Arg Val His Ala Pro Gln Thr Thr Arg Val Ser Arg Tyr	
115 120 125	
gga ctt aag gta ttc gtg gcg atc gtt acg gtg gtg cgc ccg ccc ggg	432
Gly Leu Lys Val Phe Val Ala Ile Val Thr Val Val Arg Pro Pro Gly	
130 135 140	
gtg ttc cta cac ttt cca caa gac cgc gtt ccg atc gcg ctg aca gac	480
Val Phe Leu His Phe Pro Gln Asp Arg Val Pro Ile Ala Leu Thr Asp	
145 150 155 160	
gcg tgc agc cag gag ggc tcc agg cta acc tct gaa gag ccg tgg ata	528
Ala Cys Ser Gln Glu Gly Ser Arg Leu Thr Ser Glu Glu Pro Trp Ile	
165 170 175	
aaa att caa ggc ttt ccc gtc cta tct gac gag acc gcg cac cca ttt	576
Lys Ile Gln Gly Phe Pro Val Leu Ser Asp Glu Thr Ala His Pro Phe	
180 185 190	
ctc tta acc cag aag acc aag ccc ttt acc gag cga aag ttt tgc cgc	624
Leu Leu Thr Gln Lys Thr Lys Pro Phe Thr Glu Arg Lys Phe Cys Arg	
195 200 205	
ctg atc atg gac aac gac cag cgc agc gcc gtc aac acc gtc tac ctg	672
Leu Ile Met Asp Asn Asp Gln Arg Ser Ala Val Asn Thr Val Tyr Leu	
210 215 220	
gga aag cag cac gtg agg gtg acc gtg acc cgc ccc ccg gaa aca atc	720
Gly Lys Gln His Val Arg Val Thr Val Thr Arg Pro Pro Glu Thr Ile	
225 230 235 240	
gtc acc gac ggc ccc gtg acg gcg acc ctg tcc ctc acc ggt aat gcg	768
Val Thr Asp Gly Pro Val Thr Ala Thr Leu Ser Leu Thr Gly Asn Ala	
245 250 255	
cca atc gcc ttt cgc cac aac cca tac ttt gaa ctc ccg tgg tcg tcc	816
Pro Ile Ala Phe Arg His Asn Pro Tyr Phe Glu Leu Pro Trp Ser Ser	
260 265 270	

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aca acg gcg ata ttc acg ccc gtg gtg tac gtg ggc ctg acc gtg tgc 864
Thr Thr Ala Ile Phe Thr Pro Val Val Tyr Val Gly Leu Thr Val Cys
      275                      280                      285

atc cca ccc aac tgt agc aaa ttc gta agg tac ggt aac acc tac gtc 912
Ile Pro Pro Asn Cys Ser Lys Phe Val Arg Tyr Gly Asn Thr Tyr Val
      290                      295                      300

tcg gca ttt aac cgc aag ctg acg gcg att att agc aat cac gcc cac 960
Ser Ala Phe Asn Arg Lys Leu Thr Ala Ile Ile Ser Asn His Ala His
      305                      310                      315                      320

aac ggc ggg ttc cgg att cag gac tgc gag tgg cca ccg aac cgg gag 1008
Asn Gly Gly Phe Arg Ile Gln Asp Cys Glu Trp Pro Pro Asn Arg Glu
      325                      330                      335

ata gag att ttg gta acc aac gtg tcc cag gcc ccg gtg tac atc agc 1056
Ile Glu Ile Leu Val Thr Asn Val Ser Gln Ala Pro Val Tyr Ile Ser
      340                      345                      350

acc ggg acg cag ctg ggg caa gcc atc ttc gtg ttc gcg ccg cgg ttc 1104
Thr Gly Thr Gln Leu Gly Gln Ala Ile Phe Val Phe Ala Pro Arg Phe
      355                      360                      365

ggg ggc ccg gcg aaa ctg cgg cag ctc ctc ggc cac cga tcg cgc gcc 1152
Gly Gly Pro Ala Lys Leu Arg Gln Leu Leu Gly His Arg Ser Arg Ala
      370                      375                      380

ctg gag ctg ccg ggc ggg gtg aca gtg gac agc caa aaa ctg tgt agg 1200
Leu Glu Leu Pro Gly Gly Val Thr Val Asp Ser Gln Lys Leu Cys Arg
      385                      390                      395                      400

ttt gag acc atg tac ctg ttt tcc acg taa 1230
Phe Glu Thr Met Tyr Leu Phe Ser Thr
      405                      410

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<210> 19
<211> 409
<212> PRT
<213> Macaca mulatta rhadinovirus 17577

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<400> 19
Met Gly Thr Pro Val Arg Phe Phe Arg Gly Glu Trp Gln Thr Ser Ser
  1      5      10      15
Leu Val Asp Asn Gly Thr Pro Arg Tyr Ser Ser Leu Val Trp Ala Ala
  20      25      30
Thr Ile His Asp Gly Tyr Leu Thr Leu Val Asn Arg Ser Glu Leu Cys
  35      40      45
Val Thr Glu Arg Ser Pro Cys Leu Pro Ala Cys Pro Ser Ile Gly Arg
  50      55      60
Leu Val Gly Lys Arg Phe Pro Gly Phe Ala Phe Ala Ser Ala Thr Leu
  65      70      75      80
Gly Asp Arg Gly Thr Arg Thr Val Phe Tyr Ala Phe Gly His Arg Asp
  85      90      95
Asn Pro Leu Asp Ile Val Pro Ala Val Val Glu Arg Ala Asp Arg Glu
  100     105     110
Leu Val Leu Arg Val His Ala Pro Gln Thr Thr Arg Val Ser Arg Tyr
  115     120     125
Gly Leu Lys Val Phe Val Ala Ile Val Thr Val Val Arg Pro Pro Gly
  130     135     140

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Val Phe Leu His Phe Pro Gln Asp Arg Val Pro Ile Ala Leu Thr Asp
145                               150                               155                               160
Ala Cys Ser Gln Glu Gly Ser Arg Leu Thr Ser Glu Glu Pro Trp Ile
                               165                               170                               175
Lys Ile Gln Gly Phe Pro Val Leu Ser Asp Glu Thr Ala His Pro Phe
                               180                               185                               190
Leu Leu Thr Gln Lys Thr Lys Pro Phe Thr Glu Arg Lys Phe Cys Arg
                               195                               200                               205
Leu Ile Met Asp Asn Asp Gln Arg Ser Ala Val Asn Thr Val Tyr Leu
                               210                               215                               220
Gly Lys Gln His Val Arg Val Thr Val Thr Arg Pro Pro Glu Thr Ile
225                               230                               235                               240
Val Thr Asp Gly Pro Val Thr Ala Thr Leu Ser Leu Thr Gly Asn Ala
                               245                               250                               255
Pro Ile Ala Phe Arg His Asn Pro Tyr Phe Glu Leu Pro Trp Ser Ser
                               260                               265                               270
Thr Thr Ala Ile Phe Thr Pro Val Val Tyr Val Gly Leu Thr Val Cys
                               275                               280                               285
Ile Pro Pro Asn Cys Ser Lys Phe Val Arg Tyr Gly Asn Thr Tyr Val
290                               295                               300
Ser Ala Phe Asn Arg Lys Leu Thr Ala Ile Ile Ser Asn His Ala His
305                               310                               315                               320
Asn Gly Gly Phe Arg Ile Gln Asp Cys Glu Trp Pro Pro Asn Arg Glu
                               325                               330                               335
Ile Glu Ile Leu Val Thr Asn Val Ser Gln Ala Pro Val Tyr Ile Ser
                               340                               345                               350
Thr Gly Thr Gln Leu Gly Gln Ala Ile Phe Val Phe Ala Pro Arg Phe
                               355                               360                               365
Gly Gly Pro Ala Lys Leu Arg Gln Leu Leu Gly His Arg Ser Arg Ala
370                               375                               380
Leu Glu Leu Pro Gly Gly Val Thr Val Asp Ser Gln Lys Leu Cys Arg
385                               390                               395                               400
Phe Glu Thr Met Tyr Leu Phe Ser Thr
                               405

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<210> 20
<211> 624
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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<220>
<221> CDS
<222> (1)..(624)

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```

<400> 20
atg ttc cct gtc tgg ttc gtc ttg ttt tac ctg tcg tgt tgg gcg gcc      48
Met Phe Pro Val Trp Phe Val Leu Phe Tyr Leu Ser Cys Trp Ala Ala
   1                               5                               10                               15

agc cct acg ctg gcg cct ccc ccg act gcc gct gga att aac gtt ctc      96
Ser Pro Thr Leu Ala Pro Pro Pro Thr Ala Ala Gly Ile Asn Val Leu
   20                               25                               30

ccc cag tgg gcc ggc aac cgc gcc tct ctt gac agg acc agg ggg cgc     144
Pro Gln Trp Ala Gly Asn Arg Ala Ser Leu Asp Arg Thr Arg Gly Arg
   35                               40                               45

ctg tct gaa gtg ggg tta aac ata cag cgc tgg ttc gtt tac ctg tgc     192
Leu Ser Glu Val Gly Leu Asn Ile Gln Arg Trp Phe Val Tyr Leu Cys

```

50	55	60	
cac cac tcc act ctc tgt cgg gtg cgt gag tac ccg cgc atc atg tcg			240
His His Ser Thr Leu Cys Arg Val Arg Glu Tyr Pro Arg Ile Met Ser			
65	70	75	80
ttt gtt cac ttc cct ata ttg atg tct aac gtt gag tgc cag cgc cgc			288
Phe Val His Phe Pro Ile Leu Met Ser Asn Val Glu Cys Gln Arg Arg			
	85	90	95
gag ttt cgc ggg gcc gag tgt atg aac gcc atg gtt cgc ggg ctc cgg			336
Glu Phe Arg Gly Ala Glu Cys Met Asn Ala Met Val Arg Gly Leu Arg			
	100	105	110
gcc tac gag agt tac ctg acg cga ctg agg atg ctg ctg gac gac gcg			384
Ala Tyr Glu Ser Tyr Leu Thr Arg Leu Arg Met Leu Leu Asp Asp Ala			
	115	120	125
ccc ggg gac gcg gac gcc gcg gcc att ggc tcc gcg gtg acc gtg gtg			432
Pro Gly Asp Ala Asp Ala Ala Ile Gly Ser Ala Val Thr Val Val			
	130	135	140
ctg tcc gcc ctc gac tct cta att gag gag ctt ccc gta aat aac aag			480
Leu Ser Ala Leu Asp Ser Leu Ile Glu Glu Leu Pro Val Asn Asn Lys			
	145	150	155
ata ggt ggc gcg gag tct aat gaa aaa acc gtg cgt gcg ttg gga ggg			528
Ile Gly Gly Ala Glu Ser Asn Glu Lys Thr Val Arg Ala Leu Gly Gly			
	165	170	175
cag agc ccc cgg gac gtt gtt ctc agc gcg ttt cgc ata ctg gaa tat			576
Gln Ser Pro Arg Asp Val Val Leu Ser Ala Phe Arg Ile Leu Glu Tyr			
	180	185	190
cta cag atg ttt ttg cgg gac ggg cgc cgc gca ata gct atg atg taa			624
Leu Gln Met Phe Leu Arg Asp Gly Arg Arg Ala Ile Ala Met Met			
	195	200	205

&lt;210&gt; 21

&lt;211&gt; 207

&lt;212&gt; PRT

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 21

Met Phe Pro Val Trp Phe Val Leu Phe Tyr Leu Ser Cys Trp Ala Ala			
1	5	10	15
Ser Pro Thr Leu Ala Pro Pro Pro Thr Ala Ala Gly Ile Asn Val Leu			
	20	25	30
Pro Gln Trp Ala Gly Asn Arg Ala Ser Leu Asp Arg Thr Arg Gly Arg			
	35	40	45
Leu Ser Glu Val Gly Leu Asn Ile Gln Arg Trp Phe Val Tyr Leu Cys			
	50	55	60
His His Ser Thr Leu Cys Arg Val Arg Glu Tyr Pro Arg Ile Met Ser			
	65	70	75
Phe Val His Phe Pro Ile Leu Met Ser Asn Val Glu Cys Gln Arg Arg			
	85	90	95
Glu Phe Arg Gly Ala Glu Cys Met Asn Ala Met Val Arg Gly Leu Arg			
	100	105	110
Ala Tyr Glu Ser Tyr Leu Thr Arg Leu Arg Met Leu Leu Asp Asp Ala			
	115	120	125

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Pro Gly Asp Ala Asp Ala Ala Ala Ile Gly Ser Ala Val Thr Val Val
  130                      135                      140
Leu Ser Ala Leu Asp Ser Leu Ile Glu Glu Leu Pro Val Asn Asn Lys
 145                      150                      155                      160
Ile Gly Gly Ala Glu Ser Asn Glu Lys Thr Val Arg Ala Leu Gly Gly
                      165                      170                      175
Gln Ser Pro Arg Asp Val Val Leu Ser Ala Phe Arg Ile Leu Glu Tyr
                      180                      185                      190
Leu Gln Met Phe Leu Arg Asp Gly Arg Arg Ala Ile Ala Met Met
                      195                      200                      205

```

<210> 22  
 <211> 1002  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(1002)

<400> 22  
 atg att gtc ctg gtg cat ctc ggt atc tgc tac gtt aaa aaa att ata 48  
 Met Ile Val Leu Val His Leu Gly Ile Cys Tyr Val Lys Lys Ile Ile  
   1                          5                          10                          15

ccc gtt tgc gtg gct gga atc gcg gcc gca cga ctc cgg gtt ttt tcc 96  
 Pro Val Cys Val Ala Gly Ile Ala Ala Ala Arg Leu Arg Val Phe Ser  
                           20                          25                          30

gca ccc gaa ggt gcc gcg gcc gtc cgc tgc gcg tgc cgc ggc gac cac 144  
 Ala Pro Glu Gly Ala Ala Ala Val Arg Cys Ala Cys Arg Gly Asp His  
                           35                          40                          45

ggc gag ctg cag tac ttg gcg cac ctg gat tta att att aaa cac ggc 192  
 Gly Glu Leu Gln Tyr Leu Ala His Leu Asp Leu Ile Ile Lys His Gly  
   50                          55                          60

gtg cag agg gag gac agg acg ggc gtg ggc acc agg tcc gtg ttc ggg 240  
 Val Gln Arg Glu Asp Arg Thr Gly Val Gly Thr Arg Ser Val Phe Gly  
   65                          70                          75                          80

ctt cag gcc cga tat aac ctc agg gac gag ttt cct ctg tta acc acc 288  
 Leu Gln Ala Arg Tyr Asn Leu Arg Asp Glu Phe Pro Leu Leu Thr Thr  
                           85                          90                          95

aaa agg gtg ttt tgg agg ggc gtc gtg gag gag ttg ctg tgg ttt atc 336  
 Lys Arg Val Phe Trp Arg Gly Val Val Glu Glu Leu Leu Trp Phe Ile  
                           100                          105                          110

agg ggc tcc acc gac tcc acc gaa ctg tcg cgc cgc ggc gta aaa att 384  
 Arg Gly Ser Thr Asp Ser Thr Glu Leu Ser Arg Arg Gly Val Lys Ile  
                           115                          120                          125

tgg gac gcg cac ggg tcc cgc gcc ttt ttg gcg gcg cag ggc ttc ggg 432  
 Trp Asp Ala His Gly Ser Arg Ala Phe Leu Ala Ala Gln Gly Phe Gly  
   130                          135                          140

gac cgc cgc gag ggc gat ctg ggg ccg gtg tac ggg ttc cag tgg aga 480  
 Asp Arg Arg Glu Gly Asp Leu Gly Pro Val Tyr Gly Phe Gln Trp Arg

145	150	155	160	
cat ttt ggg gcg gag tac agg ggg gcc gac gcc aac tac gag ggt cag	528			
His Phe Gly Ala Glu Tyr Arg Gly Ala Asp Ala Asn Tyr Glu Gly Gln				
165	170	175		
ggg gtg gac cag ctg cgt tac gtg gtg gat cta att aac agg cgg ccc	576			
Gly Val Asp Gln Leu Arg Tyr Val Val Asp Leu Ile Asn Arg Arg Pro				
180	185	190		
cac gat cgg cgc atc gtt atg tgc gcg tgg aac ccc gcg gac ctc gcg	624			
His Asp Arg Arg Ile Val Met Cys Ala Trp Asn Pro Ala Asp Leu Ala				
195	200	205		
cgg atg gct ctc cct cct tgt cac gtt ttg tgt cag ttt tac gtg gct	672			
Arg Met Ala Leu Pro Pro Cys His Val Leu Cys Gln Phe Tyr Val Ala				
210	215	220		
cgg ggg gag ctg tcc tgc cag ctg tac cag agg tcc gcc gac atg ggc	720			
Arg Gly Glu Leu Ser Cys Gln Leu Tyr Gln Arg Ser Ala Asp Met Gly				
225	230	235	240	
ctc ggg gtc ccg ttt aac atc gcc agc tac gcc ctc ctg acg tat ctg	768			
Leu Gly Val Pro Phe Asn Ile Ala Ser Tyr Ala Leu Leu Thr Tyr Leu				
245	250	255		
atc gct cac gtc acg ggc ctg acc ccg gga gac ttt gtg cac acc ttg	816			
Ile Ala His Val Thr Gly Leu Thr Pro Gly Asp Phe Val His Thr Leu				
260	265	270		
ggg gac gcc cac gtt tac aac aac cac gtt gat ccc ctg ctg ctt cag	864			
Gly Asp Ala His Val Tyr Asn Asn His Val Asp Pro Leu Leu Leu Gln				
275	280	285		
ctg cgg agg acc ccg cgt ccg ttt ccg cgg ctg aag att ttg aga aag	912			
Leu Arg Arg Thr Pro Arg Pro Phe Pro Arg Leu Lys Ile Leu Arg Lys				
290	295	300		
gtg gcg cgt ctg gag gac ttt acg cgc gcg gat ctg agt ctc gag ggc	960			
Val Ala Arg Leu Glu Asp Phe Thr Arg Ala Asp Leu Ser Leu Glu Gly				
305	310	315	320	
tac gac ccc cat ccc cac ata gag atg gag atg gcc gtt tga	1002			
Tyr Asp Pro His Pro His Ile Glu Met Glu Met Ala Val				
325	330			

&lt;210&gt; 23

&lt;211&gt; 333

&lt;212&gt; PRT

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 23

Met Ile Val Leu Val His Leu Gly Ile Cys Tyr Val Lys Lys Ile Ile	
1 5 10 15	
Pro Val Cys Val Ala Gly Ile Ala Ala Arg Leu Arg Val Phe Ser	
20 25 30	
Ala Pro Glu Gly Ala Ala Ala Val Arg Cys Ala Cys Arg Gly Asp His	
35 40 45	
Gly Glu Leu Gln Tyr Leu Ala His Leu Asp Leu Ile Ile Lys His Gly	
50 55 60	



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Val Gln Arg Glu Asp Arg Thr Gly Val Gly Thr Arg Ser Val Phe Gly
 65              70              75              80
Leu Gln Ala Arg Tyr Asn Leu Arg Asp Glu Phe Pro Leu Leu Thr Thr
              85              90              95
Lys Arg Val Phe Trp Arg Gly Val Val Glu Glu Leu Leu Trp Phe Ile
 100              105              110
Arg Gly Ser Thr Asp Ser Thr Glu Leu Ser Arg Arg Gly Val Lys Ile
 115              120              125
Trp Asp Ala His Gly Ser Arg Ala Phe Leu Ala Ala Gln Gly Phe Gly
 130              135              140
Asp Arg Arg Glu Gly Asp Leu Gly Pro Val Tyr Gly Phe Gln Trp Arg
 145              150              155              160
His Phe Gly Ala Glu Tyr Arg Gly Ala Asp Ala Asn Tyr Glu Gly Gln
              165              170              175
Gly Val Asp Gln Leu Arg Tyr Val Val Asp Leu Ile Asn Arg Arg Pro
 180              185              190
His Asp Arg Arg Ile Val Met Cys Ala Trp Asn Pro Ala Asp Leu Ala
 195              200              205
Arg Met Ala Leu Pro Pro Cys His Val Leu Cys Gln Phe Tyr Val Ala
 210              215              220
Arg Gly Glu Leu Ser Cys Gln Leu Tyr Gln Arg Ser Ala Asp Met Gly
 225              230              235              240
Leu Gly Val Pro Phe Asn Ile Ala Ser Tyr Ala Leu Leu Thr Tyr Leu
              245              250              255
Ile Ala His Val Thr Gly Leu Thr Pro Gly Asp Phe Val His Thr Leu
 260              265              270
Gly Asp Ala His Val Tyr Asn Asn His Val Asp Pro Leu Leu Leu Gln
 275              280              285
Leu Arg Arg Thr Pro Arg Pro Phe Pro Arg Leu Lys Ile Leu Arg Lys
 290              295              300
Val Ala Arg Leu Glu Asp Phe Thr Arg Ala Asp Leu Ser Leu Glu Gly
 305              310              315              320
Tyr Asp Pro His Pro His Ile Glu Met Glu Met Ala Val
              325              330

```

<210> 24  
 <211> 348  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(348)

```

<400> 24
atg agg ggc ctt ttc gtg tgc gtt ttt ttt gcg gtg ttc gcg tgt gta 48
Met Arg Gly Leu Phe Val Cys Val Phe Phe Ala Val Phe Ala Cys Val
 1              5              10              15

gtt gat tat gcc ttt cct atg ggc tcc atg agc gga ccc gcg ccc gaa 96
Val Asp Tyr Ala Phe Pro Met Gly Ser Met Ser Gly Pro Ala Pro Glu
              20              25              30

ctc tgc tgt ttg ggg tat gta act cat ctg ccg cca ccc ggt tta gtg 144
Leu Cys Cys Leu Gly Tyr Val Thr His Leu Pro Pro Pro Gly Leu Val
              35              40              45

gtc tct tac tcc cac acc tcg tcg cag tgc tcg gtg gac gcc gtg ata 192
Val Ser Tyr Ser His Thr Ser Ser Gln Cys Ser Val Asp Ala Val Ile

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      50              55              60
tta aac act cgc cgc ggt aaa aag ctg tgt gcc aat ccc ggg gac gac 240
Leu Asn Thr Arg Arg Gly Lys Lys Leu Cys Ala Asn Pro Gly Asp Asp
  65              70              75              80

gca gtg aag aaa ctg ctt cag gcg gtg gac aag cgt ccc aaa aag ggc 288
Ala Val Lys Lys Leu Leu Gln Ala Val Asp Lys Arg Pro Lys Lys Gly
      85              90              95

aga aga acc cgg cgc agc ctg att gac gat tcc gaa gag ggc ctt ggc 336
Arg Arg Thr Arg Arg Ser Leu Ile Asp Asp Ser Glu Glu Gly Leu Gly
      100              105              110

agc ggg att tag 348
Ser Gly Ile
      115

```

```

<210> 25
<211> 115
<212> PRT
<213> Macaca mulatta rhadinovirus 17577

```

```

<400> 25
Met Arg Gly Leu Phe Val Cys Val Phe Phe Ala Val Phe Ala Cys Val
  1              5              10              15
Val Asp Tyr Ala Phe Pro Met Gly Ser Met Ser Gly Pro Ala Pro Glu
      20              25              30
Leu Cys Cys Leu Gly Tyr Val Thr His Leu Pro Pro Pro Gly Leu Val
      35              40              45
Val Ser Tyr Ser His Thr Ser Ser Gln Cys Ser Val Asp Ala Val Ile
      50              55              60
Leu Asn Thr Arg Arg Gly Lys Lys Leu Cys Ala Asn Pro Gly Asp Asp
      65              70              75              80
Ala Val Lys Lys Leu Gln Ala Val Asp Lys Arg Pro Lys Lys Gly
      85              90              95
Arg Arg Thr Arg Arg Ser Leu Ile Asp Asp Ser Glu Glu Gly Leu Gly
      100              105              110
Ser Gly Ile
      115

```

```

<210> 26
<211> 564
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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<220>
<221> CDS
<222> (1)..(564)

```

```

<400> 26
atg gcg gct gtt cag ggc cct ccg ccg ccc cct gag gaa gaa aat gaa 48
Met Ala Ala Val Gln Gly Pro Pro Pro Pro Pro Glu Glu Glu Asn Glu
  1              5              10              15

aat tct ttg cca gtt gac gtt tat gct ata gag ggc atc ttt ctt tac 96
Asn Ser Leu Pro Val Asp Val Tyr Ala Ile Glu Gly Ile Phe Leu Tyr
      20              25              30

```

tgt ggg ctc ggg cag gcg gag tac ttg cac cat ccc gtg ttt agc cct 144  
 Cys Gly Leu Gly Gln Ala Glu Tyr Leu His His Pro Val Phe Ser Pro  
                   35                                  40                                  45

att aag gaa ttt atc agc gcc ttt ctc aag gac agc gct cgc ctg tac 192  
 Ile Lys Glu Phe Ile Ser Ala Phe Leu Lys Asp Ser Ala Arg Leu Tyr  
                   50                                  55                                  60

gag agg ctc ttg cgc cac acc gat tac cgc tct ctg cgg gga cta aac 240  
 Glu Arg Leu Leu Arg His Thr Asp Tyr Arg Ser Leu Arg Gly Leu Asn  
                   65                                  70                                  75                                  80

gcc ata ggc caa ggg atg ctg caa ata aac acg gac gga cgc cac aac 288  
 Ala Ile Gly Gln Gly Met Leu Gln Ile Asn Thr Asp Gly Arg His Asn  
   85                                  90                                  95

tgg ggt cgc gct ttg gcc gtg ttg ggt ctt ggt gcg tat gtg gtg gat 336  
 Trp Gly Arg Ala Leu Ala Val Leu Gly Leu Gly Ala Tyr Val Val Asp  
   100                                  105                                  110

aag gtt aaa gac gac gag cgt ctt tta acg ttc gcc ata gcc gtt cta 384  
 Lys Val Lys Asp Asp Glu Arg Leu Leu Thr Phe Ala Ile Ala Val Leu  
   115                                  120                                  125

ccc gtg tac gcg tac gag gcg ctg gag tct cag tgg ttt cgt tca cac 432  
 Pro Val Tyr Ala Tyr Glu Ala Leu Glu Ser Gln Trp Phe Arg Ser His  
                   130                                  135                                  140

ggc gaa tgg gag gga ctc agg aat tac tgc gag cga ata ctg agg cat 480  
 Gly Glu Trp Glu Gly Leu Arg Asn Tyr Cys Glu Arg Ile Leu Arg His  
                   145                                  150                                  155                                  160

cgc cgc aac gcg agg aga cac atg tgc tac gga gtt gcg gct ggt ctt 528  
 Arg Arg Asn Ala Arg Arg His Met Cys Tyr Gly Val Ala Ala Gly Leu  
   165                                  170                                  175

ctg gcg cta gtg gcg ctg ttt gcc atc agg cga tag 564  
 Leu Ala Leu Val Ala Leu Phe Ala Ile Arg Arg  
   180                                  185

<210> 27  
 <211> 187  
 <212> PRT  
 <213> Macaca mulatta rhadinovirus 17577

<400> 27  
 Met Ala Ala Val Gln Gly Pro Pro Pro Pro Pro Glu Glu Glu Asn Glu  
   1                                  5                                  10                                  15  
 Asn Ser Leu Pro Val Asp Val Tyr Ala Ile Glu Gly Ile Phe Leu Tyr  
                                   20                                  25                                  30  
 Cys Gly Leu Gly Gln Ala Glu Tyr Leu His His Pro Val Phe Ser Pro  
                   35                                  40                                  45  
 Ile Lys Glu Phe Ile Ser Ala Phe Leu Lys Asp Ser Ala Arg Leu Tyr  
                   50                                  55                                  60  
 Glu Arg Leu Leu Arg His Thr Asp Tyr Arg Ser Leu Arg Gly Leu Asn  
                   65                                  70                                  75                                  80  
 Ala Ile Gly Gln Gly Met Leu Gln Ile Asn Thr Asp Gly Arg His Asn  
                                   85                                  90                                  95  
 Trp Gly Arg Ala Leu Ala Val Leu Gly Leu Gly Ala Tyr Val Val Asp

```

          100              105              110
Lys Val Lys Asp Asp Glu Arg Leu Leu Thr Phe Ala Ile Ala Val Leu
          115              120              125
Pro Val Tyr Ala Tyr Glu Ala Leu Glu Ser Gln Trp Phe Arg Ser His
          130              135              140
Gly Glu Trp Glu Gly Leu Arg Asn Tyr Cys Glu Arg Ile Leu Arg His
145              150              155              160
Arg Arg Asn Ala Arg Arg His Met Cys Tyr Gly Val Ala Ala Gly Leu
          165              170              175
Leu Ala Leu Val Ala Leu Phe Ala Ile Arg Arg
          180              185

```

<210> 28  
 <211> 1611  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(1611)

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<400> 28
atg act ccc gtg tac gtt ggg gga tac gtg gac gtg gtc agc cta cca 48
Met Thr Pro Val Tyr Val Gly Gly Tyr Val Asp Val Val Ser Leu Pro
  1              5              10              15

aag ata gaa aag gag ctg tat tta gag ccc tca atc gtg gcg acc ctg 96
Lys Ile Glu Lys Glu Leu Tyr Leu Glu Pro Ser Ile Val Ala Thr Leu
          20              25              30

ctc ccg tat acg gac cct cta ccg ata aac ata gag cac gtc ccc gaa 144
Leu Pro Tyr Thr Asp Pro Leu Pro Ile Asn Ile Glu His Val Pro Glu
          35              40              45

gcc cac gta ggt cac aca atc ggt ctc ttc caa gta aca cac ggg ata 192
Ala His Val Gly His Thr Ile Gly Leu Phe Gln Val Thr His Gly Ile
          50              55              60

ttt tgc ctg ggc aag cta acg agc cac gat ttc ttg gcc ctg gcg tca 240
Phe Cys Leu Gly Lys Leu Thr Ser His Asp Phe Leu Ala Leu Ala Ser
  65              70              75              80

cgg ctc gcg ggg gac tcg cga gcg gcc cag atc cag cta aac ccc atg 288
Arg Leu Ala Gly Asp Ser Arg Ala Ala Gln Ile Gln Leu Asn Pro Met
          85              90              95

cct cgg gac ccc ctg ttg gag atg tta cac aca tgg ctc ccg gag ctc 336
Pro Arg Asp Pro Leu Leu Glu Met Leu His Thr Trp Leu Pro Glu Leu
          100              105              110

tcc ctc tcg tcc ctc cac cca gaa gag ctg caa gac ccc aat cac cca 384
Ser Leu Ser Ser Leu His Pro Glu Glu Leu Gln Asp Pro Asn His Pro
          115              120              125

ccc gcg ttt cag cac gtc tct ctg tgc gca ctg ggg agg cgt agg ggg 432
Pro Ala Phe Gln His Val Ser Leu Cys Ala Leu Gly Arg Arg Arg Gly
          130              135              140

tca atc gcc gtt tac gga cca gac cct aca tgg gtc gtc tcc aag ttt 480

```

Ser	Ile	Ala	Val	Tyr	Gly	Pro	Asp	Pro	Thr	Trp	Val	Val	Ser	Lys	Phe	
145					150					155					160	
gat	tct	ctt	acg	cga	gag	gaa	gcc	ggt	aaa	ata	acg	gtc	aat	tgt	tta	528
Asp	Ser	Leu	Thr	Arg	Glu	Glu	Ala	Gly	Lys	Ile	Thr	Val	Asn	Cys	Leu	
				165					170					175		
gat	ctt	tgc	gaa	cgt	cag	gtg	aca	ccg	cca	gaa	ttc	gcg	gcc	cct	ctt	576
Asp	Leu	Cys	Glu	Arg	Gln	Val	Thr	Pro	Pro	Glu	Phe	Ala	Ala	Pro	Leu	
			180					185					190			
gag	aca	ctg	atg	gcc	aag	gcg	atc	gac	gcc	gga	ttt	atc	cga	gat	cgc	624
Glu	Thr	Leu	Met	Ala	Lys	Ala	Ile	Asp	Ala	Gly	Phe	Ile	Arg	Asp	Arg	
		195					200					205				
aca	gac	ctg	ctc	aaa	aca	gat	aaa	ggc	gtg	gcc	aga	gtc	gcg	aga	agt	672
Thr	Asp	Leu	Leu	Lys	Thr	Asp	Lys	Gly	Val	Ala	Arg	Val	Ala	Arg	Ser	
	210					215					220					
acg	tat	tta	aag	gca	agc	cag	ttt	ccc	tgc	gct	cag	cac	tgc	ggt	aac	720
Thr	Tyr	Leu	Lys	Ala	Ser	Gln	Phe	Pro	Cys	Ala	Gln	His	Cys	Gly	Asn	
225					230				235					240		
cgc	gac	acc	cga	acc	atg	agc	gcc	ctc	ccg	gag	gac	aac	atc	acc	att	768
Arg	Asp	Thr	Arg	Thr	Met	Ser	Ala	Leu	Pro	Glu	Asp	Asn	Ile	Thr	Ile	
				245					250					255		
ccc	aag	agc	acc	ttt	ctg	acc	atg	gtg	cag	agc	agt	ctc	gat	aac	atg	816
Pro	Lys	Ser	Thr	Phe	Leu	Thr	Met	Val	Gln	Ser	Ser	Leu	Asp	Asn	Met	
			260					265					270			
cgc	aac	cag	ggc	cac	cgc	acg	tac	gtt	tct	gcg	cca	ccc	tcg	atg	ccg	864
Arg	Asn	Gln	Gly	His	Arg	Thr	Tyr	Val	Ser	Ala	Pro	Pro	Ser	Met	Pro	
		275					280					285				
gca	acg	gcg	gcg	tat	cca	tcg	tgg	ata	ccg	ccg	cct	gag	ctg	acc	gtc	912
Ala	Thr	Ala	Ala	Tyr	Pro	Ser	Trp	Ile	Pro	Pro	Pro	Glu	Leu	Thr	Val	
	290					295					300					
cca	tcg	tac	gca	ccg	ccc	gtc	gcg	cca	ccg	ttc	cct	ttc	cag	tcg	gcg	960
Pro	Ser	Tyr	Ala	Pro	Pro	Val	Ala	Pro	Pro	Phe	Pro	Phe	Gln	Ser	Ala	
305					310					315					320	
ttt	gcc	ccc	caa	ccc	tct	ccg	tat	gcg	gcc	acg	tac	tat	tct	ccg	acg	1008
Phe	Ala	Pro	Gln	Pro	Ser	Pro	Tyr	Ala	Ala	Thr	Tyr	Tyr	Ser	Pro	Thr	
			325					330					335			
tac	ggc	tac	gct	ccg	gca	ccg	tct	cgc	cac	cag	aag	cgc	aaa	cgg	gac	1056
Tyr	Gly	Tyr	Ala	Pro	Ala	Pro	Ser	Arg	His	Gln	Lys	Arg	Lys	Arg	Asp	
			340					345					350			
gtg	gag	ctt	tcc	gac	gag	ccc	gtg	ttt	cca	ggc	gag	gag	gtc	ggc	ata	1104
Val	Glu	Leu	Ser	Asp	Glu	Pro	Val	Phe	Pro	Gly	Glu	Glu	Val	Gly	Ile	
		355					360					365				
cac	aag	gac	gtc	atg	gcg	ctg	tcc	aaa	aac	ata	ttg	gac	att	cag	gcg	1152
His	Lys	Asp	Val	Met	Ala	Leu	Ser	Lys	Asn	Ile	Leu	Asp	Ile	Gln	Ala	
		370					375					380				
gat	ctg	agg	gac	cta	aaa	cga	gcc	gcg	tcg	cag	acc	tcc	ggc	gca	cag	1200
Asp	Leu	Arg	Asp	Leu	Lys	Arg	Ala	Ala	Ser	Gln	Thr	Ser	Gly	Ala	Gln	

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385                               390                               395                               400

gac gcc gac caa cga ccg caa cca ccg ccc gtt cag ttc tcg tgg cca 1248
Asp Ala Asp Gln Arg Pro Gln Pro Pro Pro Val Gln Phe Ser Trp Pro
                               405                               410                               415

cag acc tac gcg tct gcg ccg tac cta gcg tac cag ccg cag tgg tat 1296
Gln Thr Tyr Ala Ser Ala Pro Tyr Leu Ala Tyr Gln Pro Gln Trp Tyr
                               420                               425                               430

tcc gga acg gac acc cat ctc cac gcc cca cag ccg tac cag agc gcg 1344
Ser Gly Thr Asp Thr His Leu His Ala Pro Gln Pro Tyr Gln Ser Ala
                               435                               440                               445

cag ggc atc cag caa acg caa cca ccg ccc ccg cag ccg gcg agc cac 1392
Gln Gly Ile Gln Gln Thr Gln Pro Pro Pro Pro Gln Pro Ala Ser His
                               450                               455                               460

cac gcc ggt ctc gcc acg cag ccg gca act cca gcc ccc gcc gcc caa 1440
His Ala Gly Leu Ala Thr Gln Pro Ala Thr Pro Ala Pro Ala Ala Gln
465                               470                               475                               480

gaa tct gta atg tca aac gcc att cct tca gcc tct gcc ccc cgc gct 1488
Glu Ser Val Met Ser Asn Ala Ile Pro Ser Ala Ser Ala Pro Arg Ala
                               485                               490                               495

ggc gcg tgc ccg ccc ctc gat cca gaa tgc gga cag tcc gcg cgg gcc 1536
Gly Ala Cys Pro Pro Leu Asp Pro Glu Cys Gly Gln Ser Ala Arg Ala
                               500                               505                               510

ccg gtg gag gcc agc gca cag ccg gcc ccc gtg tca cag ata caa aaa 1584
Pro Val Glu Ala Ser Ala Gln Pro Ala Pro Val Ser Gln Ile Gln Lys
                               515                               520                               525

atg ttc tgc gag gaa ctg ctc aaa taa 1611
Met Phe Cys Glu Glu Leu Leu Lys
                               530                               535

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&lt;210&gt; 29

&lt;211&gt; 536

&lt;212&gt; PRT

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 29

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Met Thr Pro Val Tyr Val Gly Gly Tyr Val Asp Val Val Ser Leu Pro
1      5      10      15
Lys Ile Glu Lys Glu Leu Tyr Leu Glu Pro Ser Ile Val Ala Thr Leu
20      25      30
Leu Pro Tyr Thr Asp Pro Leu Pro Ile Asn Ile Glu His Val Pro Glu
35      40      45
Ala His Val Gly His Thr Ile Gly Leu Phe Gln Val Thr His Gly Ile
50      55      60
Phe Cys Leu Gly Lys Leu Thr Ser His Asp Phe Leu Ala Leu Ala Ser
65      70      75      80
Arg Leu Ala Gly Asp Ser Arg Ala Ala Gln Ile Gln Leu Asn Pro Met
85      90      95
Pro Arg Asp Pro Leu Leu Glu Met Leu His Thr Trp Leu Pro Glu Leu
100     105     110
Ser Leu Ser Ser Leu His Pro Glu Glu Leu Gln Asp Pro Asn His Pro
115     120     125

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Pro Ala Phe Gln His Val Ser Leu Cys Ala Leu Gly Arg Arg Arg Gly
  130          135          140
Ser Ile Ala Val Tyr Gly Pro Asp Pro Thr Trp Val Val Ser Lys Phe
  145          150          155          160
Asp Ser Leu Thr Arg Glu Glu Ala Gly Lys Ile Thr Val Asn Cys Leu
          165          170          175
Asp Leu Cys Glu Arg Gln Val Thr Pro Pro Glu Phe Ala Ala Pro Leu
          180          185          190
Glu Thr Leu Met Ala Lys Ala Ile Asp Ala Gly Phe Ile Arg Asp Arg
          195          200          205
Thr Asp Leu Leu Lys Thr Asp Lys Gly Val Ala Arg Val Ala Arg Ser
          210          215          220
Thr Tyr Leu Lys Ala Ser Gln Phe Pro Cys Ala Gln His Cys Gly Asn
          225          230          235          240
Arg Asp Thr Arg Thr Met Ser Ala Leu Pro Glu Asp Asn Ile Thr Ile
          245          250          255
Pro Lys Ser Thr Phe Leu Thr Met Val Gln Ser Ser Leu Asp Asn Met
          260          265          270
Arg Asn Gln Gly His Arg Thr Tyr Val Ser Ala Pro Pro Ser Met Pro
          275          280          285
Ala Thr Ala Ala Tyr Pro Ser Trp Ile Pro Pro Pro Glu Leu Thr Val
          290          295          300
Pro Ser Tyr Ala Pro Pro Val Ala Pro Pro Phe Pro Phe Gln Ser Ala
          305          310          315          320
Phe Ala Pro Gln Pro Ser Pro Tyr Ala Ala Thr Tyr Tyr Ser Pro Thr
          325          330          335
Tyr Gly Tyr Ala Pro Ala Pro Ser Arg His Gln Lys Arg Lys Arg Asp
          340          345          350
Val Glu Leu Ser Asp Glu Pro Val Phe Pro Gly Glu Glu Val Gly Ile
          355          360          365
His Lys Asp Val Met Ala Leu Ser Lys Asn Ile Leu Asp Ile Gln Ala
          370          375          380
Asp Leu Arg Asp Leu Lys Arg Ala Ala Ser Gln Thr Ser Gly Ala Gln
          385          390          395          400
Asp Ala Asp Gln Arg Pro Gln Pro Pro Pro Val Gln Phe Ser Trp Pro
          405          410          415
Gln Thr Tyr Ala Ser Ala Pro Tyr Leu Ala Tyr Gln Pro Gln Trp Tyr
          420          425          430
Ser Gly Thr Asp Thr His Leu His Ala Pro Gln Pro Tyr Gln Ser Ala
          435          440          445
Gln Gly Ile Gln Gln Thr Gln Pro Pro Pro Pro Gln Pro Ala Ser His
          450          455          460
His Ala Gly Leu Ala Thr Gln Pro Ala Thr Pro Ala Pro Ala Ala Gln
          465          470          475          480
Glu Ser Val Met Ser Asn Ala Ile Pro Ser Ala Ser Ala Pro Arg Ala
          485          490          495
Gly Ala Cys Pro Pro Leu Asp Pro Glu Cys Gly Gln Ser Ala Arg Ala
          500          505          510
Pro Val Glu Ala Ser Ala Gln Pro Ala Pro Val Ser Gln Ile Gln Lys
          515          520          525
Met Phe Cys Glu Glu Leu Leu Lys
          530          535

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<210> 30
<211> 900
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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<220>

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&lt;221&gt; CDS

&lt;222&gt; (1)..(900)

&lt;400&gt; 30

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Met Phe Ile Gly Arg Gly Ser Val Tyr Gly Ser Arg Val Ala Thr Ile	
1 5 10 15	
gag ggc tct aaa tac agc tcc ttt tct atc ttt ggt agg ctg acc acg	96
Glu Gly Ser Lys Tyr Ser Ser Phe Ser Ile Phe Gly Arg Leu Thr Thr	
20 25 30	
tcc acg tat ccc cca acg tac acg gga gtc atg ttg ggt cgg tgt ctg	144
Ser Thr Tyr Pro Pro Thr Tyr Thr Gly Val Met Leu Gly Arg Cys Leu	
35 40 45	
cgt gag ccg aag gag atg agc gcc ggt ctt cgg ggg ctg atg tgg cgc	192
Arg Glu Pro Lys Glu Met Ser Ala Gly Leu Arg Gly Leu Met Trp Arg	
50 55 60	
gtt atc cgt tgt gag aat tta aat acg ttt ctc cct ggc gag ctc agg	240
Val Ile Arg Cys Glu Asn Leu Asn Thr Phe Leu Pro Gly Glu Leu Arg	
65 70 75 80	
ttt ctt cac ctg gtg ctg tgc gaa atg tac aac tac ggt ctt aac gtg	288
Phe Leu His Leu Val Leu Cys Glu Met Tyr Asn Tyr Gly Leu Asn Val	
85 90 95	
tac ctt ctg aag gag gca att gcc aat acc gga acg agg gac gat att	336
Tyr Leu Leu Lys Glu Ala Ile Ala Asn Thr Gly Thr Arg Asp Asp Ile	
100 105 110	
gtc ctc ggg cgt aag gtt ccg gtg gag ttc tgg aaa atc gtt tac gat	384
Val Leu Gly Arg Lys Val Pro Val Glu Phe Trp Lys Ile Val Tyr Asp	
115 120 125	
ggg tta aag gag atg ggg gtt tct gac gca acg ttg ctc tca gaa acc	432
Gly Leu Lys Glu Met Gly Val Ser Asp Ala Thr Leu Leu Ser Glu Thr	
130 135 140	
aaa agg ggg gct ctg tgg ctt tac ttc aac ggg cgt ccg tgc ctg tta	480
Lys Arg Gly Ala Leu Trp Leu Tyr Phe Asn Gly Arg Pro Cys Leu Leu	
145 150 155 160	
aaa ggt cta ggc gac tac gtt ttt tgc caa ctg ggg tta agc cac agc	528
Lys Gly Leu Gly Asp Tyr Val Phe Cys Gln Leu Gly Leu Ser His Ser	
165 170 175	
gta cgc gtg gtt ccg gaa aac cta acg gat ggg aat tat ctc tat aac	576
Val Arg Val Val Pro Glu Asn Leu Thr Asp Gly Asn Tyr Leu Tyr Asn	
180 185 190	
cta ggc agc gtc ata cca tgt cgc ctg ctt gtg gca ctg agc tac tgt	624
Leu Gly Ser Val Ile Pro Cys Arg Leu Leu Val Ala Leu Ser Tyr Cys	
195 200 205	
ttg gcg ttt tgg ggg cac gct gac cac gag ccc tgg gtc agg ttg ttc	672
Leu Ala Phe Trp Gly His Ala Asp His Glu Pro Trp Val Arg Leu Phe	
210 215 220	
gcc ggc aag att ttt ata ctg tac tta ata att tcc ggc cac att atg	720



Ala Gly Lys Ile Phe Ile Leu Tyr Leu Ile Ile Ser Gly His Ile Met  
 225 230 235 240

cca cgg aag tca atc tta gaa cag gtg gga acg tcc ggg tac ggt ggc 768  
 Pro Arg Lys Ser Ile Leu Glu Gln Val Gly Thr Ser Gly Tyr Gly Gly  
 245 250 255

ttc gtc gag gca gtg tgt cgc gat gtt cgc gcg gta cac ggg att ccg 816  
 Phe Val Glu Ala Val Cys Arg Asp Val Arg Ala Val His Gly Ile Pro  
 260 265 270

gcg tgg gat ttt gcg tcc gcg gct ccg gcg tta acg tct caa cag acg 864  
 Ala Trp Asp Phe Ala Ser Ala Ala Pro Ala Leu Thr Ser Gln Gln Thr  
 275 280 285

gac tac ttg ttt gcg ttc aat aac agc gta gtg tag 900  
 Asp Tyr Leu Phe Ala Phe Asn Asn Ser Val Val  
 290 295 300

<210> 31  
 <211> 299  
 <212> PRT  
 <213> Macaca mulatta rhadinovirus 17577

<400> 31  
 Met Phe Ile Gly Arg Gly Ser Val Tyr Gly Ser Arg Val Ala Thr Ile  
 1 5 10 15  
 Glu Gly Ser Lys Tyr Ser Ser Phe Ser Ile Phe Gly Arg Leu Thr Thr  
 20 25 30  
 Ser Thr Tyr Pro Pro Thr Tyr Thr Gly Val Met Leu Gly Arg Cys Leu  
 35 40 45  
 Arg Glu Pro Lys Glu Met Ser Ala Gly Leu Arg Gly Leu Met Trp Arg  
 50 55 60  
 Val Ile Arg Cys Glu Asn Leu Asn Thr Phe Leu Pro Gly Glu Leu Arg  
 65 70 75 80  
 Phe Leu His Leu Val Leu Cys Glu Met Tyr Asn Tyr Gly Leu Asn Val  
 85 90 95  
 Tyr Leu Leu Lys Glu Ala Ile Ala Asn Thr Gly Thr Arg Asp Asp Ile  
 100 105 110  
 Val Leu Gly Arg Lys Val Pro Val Glu Phe Trp Lys Ile Val Tyr Asp  
 115 120 125  
 Gly Leu Lys Glu Met Gly Val Ser Asp Ala Thr Leu Leu Ser Glu Thr  
 130 135 140  
 Lys Arg Gly Ala Leu Trp Leu Tyr Phe Asn Gly Arg Pro Cys Leu Leu  
 145 150 155 160  
 Lys Gly Leu Gly Asp Tyr Val Phe Cys Gln Leu Gly Leu Ser His Ser  
 165 170 175  
 Val Arg Val Val Pro Glu Asn Leu Thr Asp Gly Asn Tyr Leu Tyr Asn  
 180 185 190  
 Leu Gly Ser Val Ile Pro Cys Arg Leu Leu Val Ala Leu Ser Tyr Cys  
 195 200 205  
 Leu Ala Phe Trp Gly His Ala Asp His Glu Pro Trp Val Arg Leu Phe  
 210 215 220  
 Ala Gly Lys Ile Phe Ile Leu Tyr Leu Ile Ile Ser Gly His Ile Met  
 225 230 235 240  
 Pro Arg Lys Ser Ile Leu Glu Gln Val Gly Thr Ser Gly Tyr Gly Gly  
 245 250 255  
 Phe Val Glu Ala Val Cys Arg Asp Val Arg Ala Val His Gly Ile Pro  
 260 265 270  
 Ala Trp Asp Phe Ala Ser Ala Ala Pro Ala Leu Thr Ser Gln Gln Thr



Arg	Arg	Val	Phe	Pro	Arg	Asp	Leu	Arg	Gly	Thr	Thr	Asn	Phe	Gln	Asn		
			180					185					190				
tcc	acg	tct	cta	aag	cta	atg	tct	gcc	gta	atc	tca	aca	gcc	gcc	tcg	624	
Ser	Thr	Ser	Leu	Lys	Leu	Met	Ser	Ala	Val	Ile	Ser	Thr	Ala	Ala	Ser		
		195					200					205					
atc	aca	caa	gac	ttt	tac	gcg	gat	gtc	cgc	aac	gta	tcg	gac	acg	cag	672	
Ile	Thr	Gln	Asp	Phe	Tyr	Ala	Asp	Val	Arg	Asn	Val	Ser	Asp	Thr	Gln		
	210					215					220						
gcc	gcg	ctg	tgc	ctc	ctc	aac	ggg	tac	tac	tgt	cac	cgg	aca	ggc	acc	720	
Ala	Ala	Leu	Cys	Leu	Leu	Asn	Gly	Tyr	Tyr	Cys	His	Arg	Thr	Gly	Thr		
225					230					235					240		
ccg	ttg	ccg	cca	act	cga	aac	ggc	ctc	tgg	gat	aac	ctc	ggc	aca	aag	768	
Pro	Leu	Pro	Pro		Arg	Asn	Gly	Leu	Trp	Asp	Asn	Leu	Gly	Thr	Lys		
				245					250					255			
ctg	gcg	acg	ctt	gtc	tct	cac	cta	aaa	caa	aac	acg	aag	ggc	ctg	ggt	816	
Leu	Ala	Thr	Leu	Val	Ser	His	Leu	Lys	Gln	Asn	Thr	Lys	Gly	Leu	Gly		
			260					265					270				
ttc	gag	ttt	aca	tat	tcg	aat	ccg	agg	caa	cgc	gcc	tct	cta	gcg	ccc	864	
Phe	Glu	Phe	Thr	Tyr	Ser	Asn	Pro	Arg	Gln	Arg	Ala	Ser	Leu	Ala	Pro		
		275					280					285					
cta	aac	aaa	gaa	aca	aag	tac	aac	gcg	gac	ttc	ttt	aca	aac	cac	gtg	912	
Leu	Asn	Lys	Glu	Thr	Lys	Tyr	Asn	Ala	Asp	Phe	Phe	Thr	Asn	His	Val		
	290					295					300						
ata	tac	gcg	acg	ttg	gca	cag	agc	gga	ctg	cta	ccc	ggc	tcc	aag	aac	960	
Ile	Tyr	Ala	Thr	Leu	Ala	Gln	Ser	Gly	Leu	Pro	Gly	Ser	Lys	Asn			
305					310					315				320			
ccc	ggc	acc	ggc	cag	cca	cct	gga	cca	gat	ctc	gta	tac	atc	ctt	gcg	1008	
Pro	Gly	Thr	Gly	Gln	Pro	Pro	Gly	Pro	Asp	Leu	Val	Tyr	Ile	Leu	Ala		
				325					330					335			
acc	act	ttg	ttc	agc	gaa	gac	gtg	cct	ccc	ttt	caa	gcg	tac	caa	tgg	1056	
Thr	Thr	Leu	Phe	Ser	Glu	Asp	Val	Pro	Pro	Phe	Gln	Ala	Tyr	Gln	Trp		
			340					345					350				
aac	ctc	cga	gcc	ggc	ctc	tcg	gca	cta	ggc	tgt	tta	gtt	ttg	gtt	tac	1104	
Asn	Leu	Arg	Ala	Gly	Leu	Ser	Ala	Leu	Gly	Cys	Leu	Val	Leu	Val	Tyr		
		355					360					365					
gtg	cta	ttg	gag	ctg	gcc	caa	atc	aca	ccc	aga	tcg	ccc	cac	cgg	cgc	1152	
Val	Leu	Leu	Glu	Leu	Ala	Gln	Ile	Thr	Pro	Arg	Ser	Pro	His	Arg	Arg		
	370					375					380						
ctc	aac	ctg	gcc	tcg	ctc	ctg	ggc	ggg	aga	ttt	tcc	aag	gta	gaa	gac	1200	
Leu	Asn	Leu	Ala	Ser	Leu	Leu	Gly	Gly	Arg	Phe	Ser	Lys	Val	Glu	Asp		
	385				390					395				400			
ccg	tcc	ggg	tcc	aaa	caa	tac	ctt	aaa	aag	gga	caa	ctt	ttt	gat	ttc	1248	
Pro	Ser	Gly	Ser	Lys	Gln	Tyr	Leu	Lys	Lys	Gly	Gln	Leu	Phe	Asp	Phe		
				405					410				415				
ctg	aca	gaa	aat	tac	atc	tcc	cca	att	ctt	tcg	cgc	gcg	cca	gac	gcc	1296	
Leu	Thr	Glu	Asn	Tyr	Ile	Ser	Pro	Ile	Leu	Ser	Arg	Ala	Pro	Asp	Ala		

420	425	430	
ccc acg tcg ttt ttg ttc ccg ggt gcg tat cta gcg gcg ctg gag gca			1344
Pro Thr Ser Phe Leu Phe Pro Gly Ala Tyr Leu Ala Ala Leu Glu Ala			
435	440	445	
aag gcc ata tcc cat cta aaa cac act cgt ccg ttc gtc aac ctg acc			1392
Lys Ala Ile Ser His Leu Lys His Thr Arg Pro Phe Val Asn Leu Thr			
450	455	460	
ggg tcc aga ttt aac gaa atc ttt gac atc ctg aac caa aag ctc acg			1440
Gly Ser Arg Phe Asn Glu Ile Phe Asp Ile Leu Asn Gln Lys Leu Thr			
465	470	475	480
ttc agg gac gct ggc agc ctg att cag gct caa acg tcg cta cgt tta			1488
Phe Arg Asp Ala Gly Ser Leu Ile Gln Ala Gln Thr Ser Leu Arg Leu			
485	490	495	
acg gcc gag gaa ggc ctg gcc gcc atc ctt tcg cac cca tcg ccc ccc			1536
Thr Ala Glu Glu Gly Leu Ala Ala Ile Leu Ser His Pro Ser Pro Pro			
500	505	510	
ggg ctg gca cac gag ata atg aaa agc caa ttc gga gtt tac gac gac			1584
Gly Leu Ala His Glu Ile Met Lys Ser Gln Phe Gly Val Tyr Asp Asp			
515	520	525	
tac gac aga gtt tat ttt ttg gtc ctg gga tac ctg ccg gtc gcc acg			1632
Tyr Asp Arg Val Tyr Phe Leu Val Leu Gly Tyr Leu Pro Val Ala Thr			
530	535	540	
tcg gta gtg tga			1644
Ser Val Val			
545			

<210> 33  
 <211> 547  
 <212> PRT  
 <213> Macaca mulatta rhadinovirus 17577

<400> 33

Met Arg Thr Ser Glu Lys Cys Cys Met Arg Tyr Pro Arg Lys Pro Ala																			
1				5				10						15					
Arg Gln Ile Thr Ala Thr Phe Trp Ala Pro His Pro Asn Asn Val Leu																			
				20				25						30					
Phe Ile His Lys Pro Ser Leu Ile Glu Glu Arg Arg Asn Ala Phe Val																			
				35				40						45					
Met Arg Asn Gln Gln Leu Ala Leu Arg Val His Thr Leu Arg Lys Asn																			
				50				55						60					
Leu Leu Arg Leu Glu Leu Asp Asn Val Leu Gln Thr His Gln Arg Glu																			
				65				70						75					80
Thr Glu Val Val Met Arg Asp Leu Glu Thr Ile Gln Asn Met Val Gly																			
				85				90											95
Asp Leu Arg Ser Pro Gly Arg Glu Thr Ala Asn Ala Gln Thr Ser Leu																			
				100				105						110					
Asn Pro Gln Pro Lys Ile Ala Pro Gln Thr His Gly Asp Ala Phe Val																			
				115				120						125					
Val Thr Ile Ala Pro Gly Asp Pro Gly Phe Thr Val Asn Gln Asp Leu																			
				130				135						140					
Arg Leu Glu Leu Leu Pro Ser Leu Tyr Met Asn Gln Asn Gln Trp Leu																			
				145				150						155					160

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Pro Gln Tyr Gly Pro Trp Tyr Ser Ser Leu Thr Asp Asn Ala Met Gln
      165      170      175
Arg Arg Val Phe Pro Arg Asp Leu Arg Gly Thr Thr Asn Phe Gln Asn
      180      185      190
Ser Thr Ser Leu Lys Leu Met Ser Ala Val Ile Ser Thr Ala Ala Ser
      195      200      205
Ile Thr Gln Asp Phe Tyr Ala Asp Val Arg Asn Val Ser Asp Thr Gln
      210      215      220
Ala Ala Leu Cys Leu Leu Asn Gly Tyr Tyr Cys His Arg Thr Gly Thr
      225      230      235      240
Pro Leu Pro Pro Thr Arg Asn Gly Leu Trp Asp Asn Leu Gly Thr Lys
      245      250      255
Leu Ala Thr Leu Val Ser His Leu Lys Gln Asn Thr Lys Gly Leu Gly
      260      265      270
Phe Glu Phe Thr Tyr Ser Asn Pro Arg Gln Arg Ala Ser Leu Ala Pro
      275      280      285
Leu Asn Lys Glu Thr Lys Tyr Asn Ala Asp Phe Phe Thr Asn His Val
      290      295      300
Ile Tyr Ala Thr Leu Ala Gln Ser Gly Leu Leu Pro Gly Ser Lys Asn
      305      310      315      320
Pro Gly Thr Gly Gln Pro Pro Gly Pro Asp Leu Val Tyr Ile Leu Ala
      325      330      335
Thr Thr Leu Phe Ser Glu Asp Val Pro Phe Gln Ala Tyr Gln Trp
      340      345      350
Asn Leu Arg Ala Gly Leu Ser Ala Leu Gly Cys Leu Val Leu Val Tyr
      355      360      365
Val Leu Leu Glu Leu Ala Gln Ile Thr Pro Arg Ser Pro His Arg Arg
      370      375      380
Leu Asn Leu Ala Ser Leu Leu Gly Gly Arg Phe Ser Lys Val Glu Asp
      385      390      395      400
Pro Ser Gly Ser Lys Gln Tyr Leu Lys Lys Gly Gln Leu Phe Asp Phe
      405      410      415
Leu Thr Glu Asn Tyr Ile Ser Pro Ile Leu Ser Arg Ala Pro Asp Ala
      420      425      430
Pro Thr Ser Phe Leu Phe Pro Gly Ala Tyr Leu Ala Ala Leu Glu Ala
      435      440      445
Lys Ala Ile Ser His Leu Lys His Thr Arg Pro Phe Val Asn Leu Thr
      450      455      460
Gly Ser Arg Phe Asn Glu Ile Phe Asp Ile Leu Asn Gln Lys Leu Thr
      465      470      475      480
Phe Arg Asp Ala Gly Ser Leu Ile Gln Ala Gln Thr Ser Leu Arg Leu
      485      490      495
Thr Ala Glu Glu Gly Leu Ala Ala Ile Leu Ser His Pro Ser Pro Pro
      500      505      510
Gly Leu Ala His Glu Ile Met Lys Ser Gln Phe Gly Val Tyr Asp Asp
      515      520      525
Tyr Asp Arg Val Tyr Phe Leu Val Leu Gly Tyr Leu Pro Val Ala Thr
      530      535      540
Ser Val Val
545

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<210> 34
<211> 1053
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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<220>
<221> CDS
<222> (1)..(1053)

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&lt;400&gt; 34

atg gcg ttt gca aat caa tgt aag cac gtc gcg acc ctc gaa gcc ctt	48
Met Ala Phe Ala Asn Gln Cys Lys His Val Ala Thr Leu Glu Ala Leu	
1 5 10 15	
ccg gcc tca cgc aaa cgg gct gga act cgc gcc cac tta gca gta tac	96
Pro Ala Ser Arg Lys Arg Ala Gly Thr Arg Ala His Leu Ala Val Tyr	
20 25 30	
cga cgg tta atc aaa cac cgg tcg ctt gat gat att tta aag ttt ctt	144
Arg Arg Leu Ile Lys His Arg Ser Leu Asp Asp Ile Leu Lys Phe Leu	
35 40 45	
tca att cgc cca aca ctc agg gca acc aaa aac gtt aaa ttt agg att	192
Ser Ile Arg Pro Thr Leu Arg Ala Thr Lys Asn Val Lys Phe Arg Ile	
50 55 60	
ttt ttc gag gtt tcc cta ggt agg cga ata gca gat tgt gtg ctt acc	240
Phe Phe Glu Val Ser Leu Gly Arg Arg Ile Ala Asp Cys Val Leu Thr	
65 70 75 80	
gtt aat agc gaa cat caa aaa acg tgc tac gta att gaa ctc aag acg	288
Val Asn Ser Glu His Gln Lys Thr Cys Tyr Val Ile Glu Leu Lys Thr	
85 90 95	
tgc cta agc gcg gct gta ttt ccc ggc aac gca ata aaa ata tca cag	336
Cys Leu Ser Ala Ala Val Phe Pro Gly Asn Ala Ile Lys Ile Ser Gln	
100 105 110	
cga tgg cag ggc tta cac caa ctg aca gat tcc gtg gca tat ata ggc	384
Arg Trp Gln Gly Leu His Gln Leu Thr Asp Ser Val Ala Tyr Ile Gly	
115 120 125	
aga gcc gcg cca aga gga cac gaa aac tgg tcg gta agg ccc tgg ctg	432
Arg Ala Ala Pro Arg Gly His Glu Asn Trp Ser Val Arg Pro Trp Leu	
130 135 140	
cta ttt aag aac cag aaa aca ctt aaa aca att cat act gag tca tca	480
Leu Phe Lys Asn Gln Lys Thr Leu Lys Thr Ile His Thr Glu Ser Ser	
145 150 155 160	
gcg ttt ccg cct aca ttt atc aac acc acg tcg gcg gcg ctt aac ggg	528
Ala Phe Pro Pro Thr Phe Ile Asn Thr Thr Ser Ala Ala Leu Asn Gly	
165 170 175	
ttt ttt agc caa tgg gaa gat gcg cac gtc aga aaa atg ctg tat gag	576
Phe Phe Ser Gln Trp Glu Asp Ala His Val Arg Lys Met Leu Tyr Glu	
180 185 190	
ata ccc acg aaa acc agc gcg gca aat tac cgc aac ttt ttg ggc ccc	624
Ile Pro Thr Lys Thr Ser Ala Ala Asn Tyr Arg Asn Phe Leu Gly Pro	
195 200 205	
cca tcc aaa caa cgt tct gtt tat tca caa acc atc tct gat aga aga	672
Pro Ser Lys Gln Arg Ser Val Tyr Ser Gln Thr Ile Ser Asp Arg Arg	
210 215 220	
aag aag aaa cgc gtt tgt gat gcg aaa tca aca gct ggc gct aag ggt	720
Lys Lys Lys Arg Val Cys Asp Ala Lys Ser Thr Ala Gly Ala Lys Gly	
225 230 235 240	

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tca cac gct gcg aaa aaa cct gct ccg gct aga act aga caa cgt gct 768
Ser His Ala Ala Lys Lys Pro Ala Pro Ala Arg Thr Arg Gln Arg Ala
                245                250                255

gca aac gca cca acg gga aac aga agt ggt cat gcg cga cct aga aac 816
Ala Asn Ala Pro Thr Gly Asn Arg Ser Gly His Ala Arg Pro Arg Asn
                260                265                270

aat tca aaa cat ggt cgg gga tct gcg gtc ccc ggg cag gga aac cgc 864
Asn Ser Lys His Gly Arg Gly Ser Ala Val Pro Gly Gln Gly Asn Arg
                275                280                285

caa tgc cca aac atc act aaa ccc gca acc caa aat cgc ccc gca gac 912
Gln Cys Pro Asn Ile Thr Lys Pro Ala Thr Gln Asn Arg Pro Ala Asp
                290                295                300

aca tgg aga cgc gtt cgt tgt cac aat agc ccc cgg aga ccc ggg att 960
Thr Trp Arg Arg Val Arg Cys His Asn Ser Pro Arg Arg Pro Gly Ile
305                310                315                320

cac ggt aaa cca gga tct ccg tct gga gct cct gcc aag cct gta cat 1008
His Gly Lys Pro Gly Ser Pro Ser Gly Ala Pro Ala Lys Pro Val His
                325                330                335

gaa cca aaa cca atg gct gcc aca ata cgg gcc gtg gta cag tag 1053
Glu Pro Lys Pro Met Ala Ala Thr Ile Arg Ala Val Val Gln
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<210> 35
<211> 350
<212> PRT
<213> Macaca mulatta rhadinovirus 17577

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<400> 35
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Pro Ala Ser Arg Lys Arg Ala Gly Thr Arg Ala His Leu Ala Val Tyr
          20          25          30
Arg Arg Leu Ile Lys His Arg Ser Leu Asp Asp Ile Leu Lys Phe Leu
          35          40          45
Ser Ile Arg Pro Thr Leu Arg Ala Thr Lys Asn Val Lys Phe Arg Ile
          50          55          60
Phe Phe Glu Val Ser Leu Gly Arg Arg Ile Ala Asp Cys Val Leu Thr
          65          70          75          80
Val Asn Ser Glu His Gln Lys Thr Cys Tyr Val Ile Glu Leu Lys Thr
          85          90          95
Cys Leu Ser Ala Ala Val Phe Pro Gly Asn Ala Ile Lys Ile Ser Gln
          100          105          110
Arg Trp Gln Gly Leu His Gln Leu Thr Asp Ser Val Ala Tyr Ile Gly
          115          120          125
Arg Ala Ala Pro Arg Gly His Glu Asn Trp Ser Val Arg Pro Trp Leu
          130          135          140
Leu Phe Lys Asn Gln Lys Thr Leu Lys Thr Ile His Thr Glu Ser Ser
          145          150          155          160
Ala Phe Pro Pro Thr Phe Ile Asn Thr Thr Ser Ala Ala Leu Asn Gly
          165          170          175
Phe Phe Ser Gln Trp Glu Asp Ala His Val Arg Lys Met Leu Tyr Glu
          180          185          190
Ile Pro Thr Lys Thr Ser Ala Ala Asn Tyr Arg Asn Phe Leu Gly Pro

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Pro	Ser	Lys	Gln	Arg	Ser	Val	Tyr	Ser	Gln	Thr	Ile	Ser	Asp	Arg	Arg
210						215					220				
Lys	Lys	Lys	Arg	Val	Cys	Asp	Ala	Lys	Ser	Thr	Ala	Gly	Ala	Lys	Gly
225					230					235				240	
Ser	His	Ala	Ala	Lys	Lys	Pro	Ala	Pro	Ala	Arg	Thr	Arg	Gln	Arg	Ala
				245					250				255		
Ala	Asn	Ala	Pro	Thr	Gly	Asn	Arg	Ser	Gly	His	Ala	Arg	Pro	Arg	Asn
			260					265					270		
Asn	Ser	Lys	His	Gly	Arg	Gly	Ser	Ala	Val	Pro	Gly	Gln	Gly	Asn	Arg
		275					280					285			
Gln	Cys	Pro	Asn	Ile	Thr	Lys	Pro	Ala	Thr	Gln	Asn	Arg	Pro	Ala	Asp
	290					295				300					
Thr	Trp	Arg	Arg	Val	Arg	Cys	His	Asn	Ser	Pro	Arg	Arg	Pro	Gly	Ile
305					310					315				320	
His	Gly	Lys	Pro	Gly	Ser	Pro	Ser	Gly	Ala	Pro	Ala	Lys	Pro	Val	His
			325					330					335		
Glu	Pro	Lys	Pro	Met	Ala	Ala	Thr	Ile	Arg	Ala	Val	Val	Gln		
		340						345					350		

<210> 36  
 <211> 1674  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(1674)

<400> 36																
atg	gcc	gaa	gga	ggg	tct	ggc	ttt	ggc	gac	gag	ctt	gtc	cgt	cag	atg	48
Met	Ala	Glu	Gly	Gly	Ser	Gly	Phe	Gly	Asp	Glu	Leu	Val	Arg	Gln	Met	
1				5					10					15		
cgg gat cgg aag cct aga tgg gac gag tct tcc gac gat act gat gac															96	
Arg	Asp	Arg	Lys	Pro	Arg	Trp	Asp	Glu	Ser	Ser	Asp	Asp	Thr	Asp	Asp	
			20					25					30			
gtt gac acc gaa agc acc gat ctt gag tat gat gat gtg ttc ccc gtg															144	
Val	Asp	Thr	Glu	Ser	Thr	Asp	Leu	Glu	Tyr	Asp	Asp	Val	Phe	Pro	Val	
			35				40					45				
gta gat acg cac ggc tta atg agc cct gga agt caa aac tat gac gta															192	
Val	Asp	Thr	His	Gly	Leu	Met	Ser	Pro	Gly	Ser	Gln	Asn	Tyr	Asp	Val	
			50				55				60					
ccc acg tct ccg tcc gga acg ccg tgg gaa tta ctg cac ccg gac gcc															240	
Pro	Thr	Ser	Pro	Ser	Gly	Thr	Pro	Trp	Glu	Leu	Leu	His	Pro	Asp	Ala	
	65				70				75				80			
ctg tat gca cat ccg agg tgc ccg cct aaa agg gcg gtg gtg ccg ggc															288	
Leu	Tyr	Ala	His	Pro	Arg	Cys	Pro	Pro	Lys	Arg	Ala	Val	Val	Pro	Gly	
			85					90					95			
ggg ggc gcg cgt ccc aag gtg tcc gcg ttc tcg gct aga ctt caa tat															336	
Gly	Gly	Ala	Arg	Pro	Lys	Val	Ser	Ala	Phe	Ser	Ala	Arg	Leu	Gln	Tyr	
			100					105					110			
gtt gga cga cag agt ttt ggg gat aga gag acg ccg cag ctt acc ggg															384	



Val	Gly	Arg	Gln	Ser	Phe	Gly	Asp	Arg	Glu	Thr	Arg	Gln	Leu	Thr	Gly		
		115					120					125					
gct	cag	ttt	tct	tcc	gag	agc	gag	cac	gaa	tat	gcg	gaa	ata	ccg	gag	432	
Ala	Gln	Phe	Ser	Ser	Glu	Ser	Glu	His	Glu	Tyr	Ala	Glu	Ile	Pro	Glu		
	130					135					140						
cgt	act	act	aca	cgc	ccg	gtt	gaa	agc	ggg	gac	aag	aga	aat	ttc	acc	480	
Arg	Thr	Thr	Thr	Arg	Pro	Val	Glu	Ser	Gly	Asp	Lys	Arg	Asn	Phe	Thr		
145				150						155					160		
tcc	ggg	cgt	agg	ggg	gca	atc	tcg	gga	ccc	tcg	tcg	aca	aaa	cct	agt	528	
Ser	Gly	Arg	Arg	Gly	Ala	Ile	Ser	Gly	Pro	Ser	Ser	Thr	Lys	Pro	Ser		
				165					170					175			
cac	ggg	gag	ggg	tta	aca	cgt	aag	act	aaa	acg	tcg	ctg	agt	gtt	agt	576	
His	Gly	Ala	Gly	Leu	Thr	Arg	Lys	Thr	Lys	Thr	Ser	Leu	Ser	Val	Ser		
			180					185						190			
ctt	aaa	aac	ttg	ctg	cgg	ata	aag	gac	gat	gat	gct	aag	gtt	gat	gta	624	
Leu	Lys	Asn	Leu	Leu	Arg	Ile	Lys	Asp	Asp	Asp	Ala	Lys	Val	Asp	Val		
		195					200					205					
ccc	agg	ccg	gtt	acc	gtg	ccg	gtt	cat	ctc	atg	cag	ccg	cat	cct	atg	672	
Pro	Arg	Pro	Val	Thr	Val	Pro	Val	His	Leu	Met	Gln	Pro	His	Pro	Met		
	210					215					220						
acg	gaa	tat	aga	aat	gcc	ttt	tta	atc	tat	cta	gag	ggg	gtc	atg	ggg	720	
Thr	Glu	Tyr	Arg	Asn	Ala	Phe	Leu	Ile	Tyr	Leu	Glu	Gly	Val	Met	Gly		
225					230					235					240		
gtt	gga	aaa	aca	acg	cta	ttg	aat	tca	atg	act	ggc	atg	gtg	ccg	cag	768	
Val	Gly	Lys	Thr	Thr	Leu	Leu	Asn	Ser	Met	Thr	Gly	Met	Val	Pro	Gln		
				245					250					255			
gaa	aac	gtc	tta	agc	tgt	ccc	gag	ccc	atg	aaa	ttt	tgg	acg	tgt	gtt	816	
Glu	Asn	Val	Leu	Ser	Cys	Pro	Glu	Pro	Met	Lys	Phe	Trp	Thr	Cys	Val		
			260					265					270				
tat	tca	aat	tgc	ctt	aaa	gaa	cag	cgc	agc	ata	gtt	aag	caa	ggc	acc	864	
Tyr	Ser	Asn	Cys	Leu	Lys	Glu	Gln	Arg	Ser	Ile	Val	Lys	Gln	Gly	Thr		
		275					280					285					
cac	ggg	aaa	ttg	atc	act	tct	gct	cgc	gta	tac	gcg	tgt	cag	agc	aag	912	
His	Gly	Lys	Leu	Ile	Thr	Ser	Ala	Arg	Val	Tyr	Ala	Cys	Gln	Ser	Lys		
	290					295					300						
ttt	gag	cta	ccg	ttt	cgt	gag	aca	gcc	gcc	ggc	atc	ggg	cgc	aac	ctg	960	
Phe	Ala	Leu	Pro	Phe	Arg	Ala	Thr	Ala	Ala	Gly	Ile	Gly	Arg	Asn	Leu		
305					310					315					320		
caa	ccg	tgg	ctg	gtg	gga	aac	ggg	agc	aca	aag	cca	gag	aat	tgg	att	1008	
Gln	Pro	Trp	Leu	Val	Gly	Asn	Gly	Ser	Thr	Lys	Pro	Ala	Asn	Trp	Ile		
				325				330					335				
gtt	ttt	gac	aga	cac	cta	ctg	tcc	gca	acg	gtg	gtt	ttt	ccg	ctg	gtt	1056	
Val	Phe	Asp	Arg	His	Leu	Leu	Ser	Ala	Thr	Val	Val	Phe	Pro	Leu	Val		
			340					345					350				
cac	gta	aag	tac	aac	agg	cta	acg	ccg	gat	cat	ctg	ttt	caa	atc	cta	1104	
His	Val	Lys	Tyr	Asn	Arg	Leu	Thr	Pro	Asp	His	Leu	Phe	Gln	Ile	Leu		

355	360	365	
tct ctt ttc tcg gca cac gac ggc gat gtg gtc gtt ttg cta acg ctc			1152
Ser Leu Phe Ser Ala His Asp Gly Asp Val Val Val Leu Leu Thr Leu			
370	375	380	
aac agt tcg gag gcg cac agg cgc att caa agt cga ggc cgt aag gaa			1200
Asn Ser Ser Glu Ala His Arg Arg Ile Gln Ser Arg Gly Arg Lys Glu			
385	390	395	400
gaa aaa gga atc acg caa aac tac ttg cga cag gta gcg tgg gcg tac			1248
Glu Lys Gly Ile Thr Gln Asn Tyr Leu Arg Gln Val Ala Trp Ala Tyr			
	405	410	415
cat gcc gtg ttc tgt acg tgg gtg atg atg caa tat ctc aca ccg gag			1296
His Ala Val Phe Cys Thr Trp Val Met Met Gln Tyr Leu Thr Pro Glu			
	420	425	430
caa atg gtt cag ctg tgt gta caa act gtg tcc ata gag gac ata tgc			1344
Gln Met Val Gln Leu Cys Val Gln Thr Val Ser Ile Glu Asp Ile Cys			
	435	440	445
aat atg aat tcc aga ttg act cat cgg ttt cta acc cta aca aaa cta			1392
Asn Met Asn Ser Arg Leu Thr His Arg Phe Leu Thr Leu Thr Lys Leu			
	450	455	460
cat gaa cag agt atg ata ccc atg gtg gca gaa atg tta gta tcg gtt			1440
His Glu Gln Ser Met Ile Pro Met Val Ala Glu Met Leu Val Ser Val			
	465	470	475
aaa gaa cac gtg acc tta atg gag gtc tgt ttg gga ctc ttt aaa gag			1488
Lys Glu His Val Thr Leu Met Glu Val Cys Leu Gly Leu Phe Lys Glu			
	485	490	495
cta cga aag ctt caa att tta att gtt gac gca gga gaa cat cta gat			1536
Leu Arg Lys Leu Gln Ile Leu Ile Val Asp Ala Gly Glu His Leu Asp			
	500	505	510
gat gcg tgt ggc ctc tgg gga aat att tat ggg cag gtg atg tca aat			1584
Asp Ala Cys Gly Leu Trp Gly Asn Ile Tyr Gly Gln Val Met Ser Asn			
	515	520	525
gag gct att aaa cca cga gca gtg aac tgg cca gct ctt gaa agc tac			1632
Glu Ala Ile Lys Pro Arg Ala Val Asn Trp Pro Ala Leu Glu Ser Tyr			
	530	535	540
att caa acg cta acc aaa ttg gaa ggc aat ggc gcg tat tag			1674
Ile Gln Thr Leu Thr Lys Leu Glu Gly Asn Gly Ala Tyr			
	545	550	555

&lt;210&gt; 37

&lt;211&gt; 557

&lt;212&gt; PRT

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 37

Met Ala Glu Gly Gly Ser Gly Phe Gly Asp Glu Leu Val Arg Gln Met

1

5

10

15

Arg Asp Arg Lys Pro Arg Trp Asp Glu Ser Ser Asp Asp Thr Asp Asp

20

25

30

Val Asp Thr Glu Ser Thr Asp Leu Glu Tyr Asp Asp Val Phe Pro Val  
 35 40 45  
 Val Asp Thr His Gly Leu Met Ser Pro Gly Ser Gln Asn Tyr Asp Val  
 50 55 60  
 Pro Thr Ser Pro Ser Gly Thr Pro Trp Glu Leu Leu His Pro Asp Ala  
 65 70 75 80  
 Leu Tyr Ala His Pro Arg Cys Pro Pro Lys Arg Ala Val Val Pro Gly  
 85 90 95  
 Gly Gly Ala Arg Pro Lys Val Ser Ala Phe Ser Ala Arg Leu Gln Tyr  
 100 105 110  
 Val Gly Arg Gln Ser Phe Gly Asp Arg Glu Thr Arg Gln Leu Thr Gly  
 115 120 125  
 Ala Gln Phe Ser Ser Glu Ser Glu His Glu Tyr Ala Glu Ile Pro Glu  
 130 135 140  
 Arg Thr Thr Thr Arg Pro Val Glu Ser Gly Asp Lys Arg Asn Phe Thr  
 145 150 155 160  
 Ser Gly Arg Arg Gly Ala Ile Ser Gly Pro Ser Ser Thr Lys Pro Ser  
 165 170 175  
 His Gly Ala Gly Leu Thr Arg Lys Thr Lys Thr Ser Leu Ser Val Ser  
 180 185 190  
 Leu Lys Asn Leu Leu Arg Ile Lys Asp Asp Ala Lys Val Asp Val  
 195 200 205  
 Pro Arg Pro Val Thr Val Pro Val His Leu Met Gln Pro His Pro Met  
 210 215 220  
 Thr Glu Tyr Arg Asn Ala Phe Leu Ile Tyr Leu Glu Gly Val Met Gly  
 225 230 235 240  
 Val Gly Lys Thr Thr Leu Leu Asn Ser Met Thr Gly Met Val Pro Gln  
 245 250 255  
 Glu Asn Val Leu Ser Cys Pro Glu Pro Met Lys Phe Trp Thr Cys Val  
 260 265 270  
 Tyr Ser Asn Cys Leu Lys Glu Gln Arg Ser Ile Val Lys Gln Gly Thr  
 275 280 285  
 His Gly Lys Leu Ile Thr Ser Ala Arg Val Tyr Ala Cys Gln Ser Lys  
 290 295 300  
 Phe Ala Leu Pro Phe Arg Ala Thr Ala Ala Gly Ile Gly Arg Asn Leu  
 305 310 315 320  
 Gln Pro Trp Leu Val Gly Asn Gly Ser Thr Lys Pro Ala Asn Trp Ile  
 325 330 335  
 Val Phe Asp Arg His Leu Leu Ser Ala Thr Val Val Phe Pro Leu Val  
 340 345 350  
 His Val Lys Tyr Asn Arg Leu Thr Pro Asp His Leu Phe Gln Ile Leu  
 355 360 365  
 Ser Leu Phe Ser Ala His Asp Gly Asp Val Val Val Leu Leu Thr Leu  
 370 375 380  
 Asn Ser Ser Glu Ala His Arg Arg Ile Gln Ser Arg Gly Arg Lys Glu  
 385 390 395 400  
 Glu Lys Gly Ile Thr Gln Asn Tyr Leu Arg Gln Val Ala Trp Ala Tyr  
 405 410 415  
 His Ala Val Phe Cys Thr Trp Val Met Met Gln Tyr Leu Thr Pro Glu  
 420 425 430  
 Gln Met Val Gln Leu Cys Val Gln Thr Val Ser Ile Glu Asp Ile Cys  
 435 440 445  
 Asn Met Asn Ser Arg Leu Thr His Arg Phe Leu Thr Leu Thr Lys Leu  
 450 455 460  
 His Glu Gln Ser Met Ile Pro Met Val Ala Glu Met Leu Val Ser Val  
 465 470 475 480  
 Lys Glu His Val Thr Leu Met Glu Val Cys Leu Gly Leu Phe Lys Glu  
 485 490 495  
 Leu Arg Lys Leu Gln Ile Leu Ile Val Asp Ala Gly Glu His Leu Asp  
 500 505 510  
 Asp Ala Cys Gly Leu Trp Gly Asn Ile Tyr Gly Gln Val Met Ser Asn

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          515              520              525
Glu Ala Ile Lys Pro Arg Ala Val Asn Trp Pro Ala Leu Glu Ser Tyr
    530              535              540
Ile Gln Thr Leu Thr Lys Leu Glu Gly Asn Gly Ala Tyr
545              550              555

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<210> 38
<211> 2115
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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<220>
<221> CDS
<222> (1)..(2115)

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gta acg gac aaa tac gtg tat gat gaa aaa tca aat gta gag ttg gaa 96
Val Thr Asp Lys Tyr Val Tyr Asp Glu Lys Ser Asn Val Glu Leu Glu
      20              25              30

ttt aat gga aca att tac caa att aat tgg aga aac gta agc aaa gaa 144
Phe Asn Gly Thr Ile Tyr Gln Ile Asn Trp Arg Asn Val Ser Lys Glu
      35              40              45

tta aca tct att gta atg gaa gat gcg tgg tac gat tct tta ctg ctg 192
Leu Thr Ser Ile Val Met Glu Asp Ala Trp Tyr Asp Ser Leu Leu Leu
      50              55              60

gaa cca ttg tct gtg act ttg gaa aaa aga aaa agt ttg ctg cga tca 240
Glu Pro Leu Ser Val Thr Leu Glu Lys Arg Lys Ser Leu Leu Arg Ser
      65              70              75              80

agt ata gtt aat gtg cat aat aat gac tat aca ttt tgt aaa tct tca 288
Ser Ile Val Asn Val His Asn Asn Asp Tyr Thr Phe Cys Lys Ser Ser
      85              90              95

agt gac cat gta att aac ctt acg gtg gat ttt aat tac agt tct ttg 336
Ser Asp His Val Ile Asn Leu Thr Val Asp Phe Asn Tyr Ser Ser Leu
      100              105              110

cca ggt ttt act ggg aat ttt aat gta atg aca cat gct tta aca caa 384
Pro Gly Phe Thr Gly Asn Phe Asn Val Met Thr His Ala Leu Thr Gln
      115              120              125

ggc gtt tta tta acg aaa cgt gaa tta ttt acc aac tca aca aac att 432
Gly Val Leu Leu Thr Lys Arg Glu Leu Phe Thr Asn Ser Thr Asn Ile
      130              135              140

atg gat ctt ttt tac gcg gaa aaa ata aat gca gaa atg ttc aag att 480
Met Asp Leu Phe Tyr Ala Glu Lys Ile Asn Ala Glu Met Phe Lys Ile
      145              150              155              160

act ttt gat tat tcc aat gta ata att tcc ggc att ata aca gaa aat 528
Thr Phe Asp Tyr Ser Asn Val Ile Ile Ser Gly Ile Ile Thr Glu Asn
      165              170              175

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tgg	ata	tta	gta	tca	gtt	aca	aat	tca	agt	gta	aaa	tca	aat	atg	caa	576
Trp	Ile	Leu	Val	Ser	Val	Thr	Asn	Ser	Ser	Val	Lys	Ser	Asn	Met	Gln	
			180					185						190		
tgt	gtt	gca	ctg	ttg	ttt	ggg	gtt	cct	agc	aca	ttt	cca	gcg	tta	aaa	624
Cys	Val	Ala	Leu	Leu	Phe	Gly	Val	Pro	Ser	Thr	Phe	Pro	Ala	Leu	Lys	
		195					200					205				
ggc	tat	gta	tct	tat	cgt	gat	tta	ttg	gtc	gtt	aaa	aat	tca	aac	tat	672
Gly	Tyr	Val	Ser	Tyr	Arg	Asp	Leu	Leu	Val	Val	Lys	Asn	Ser	Asn	Tyr	
	210					215					220					
gct	ctg	ggg	gta	att	gcg	ccg	aaa	tct	tat	aat	act	ctt	gat	ttg	gca	720
Ala	Leu	Gly	Val	Ile	Ala	Pro	Lys	Ser	Tyr	Asn	Thr	Leu	Asp	Leu	Ala	
225					230					235					240	
ttt	tta	cca	aaa	aat	ttt	aca	gaa	atg	ttt	gtt	tca	gtt	ata	gat	agt	768
Phe	Leu	Pro	Lys	Asn	Phe	Thr	Glu	Met	Phe	Val	Ser	Val	Ile	Asp	Ser	
				245					250					255		
ccg	ctt	aat	gcc	att	gat	tat	ctc	aaa	gga	aaa	ctt	ttg	gct	att	gaa	816
Pro	Leu	Asn	Ala	Ile	Asp	Tyr	Leu	Lys	Gly	Lys	Leu	Leu	Ala	Ile	Glu	
			260					265					270			
gca	aag	ggg	gcc	tgt	caa	aat	cct	tca	aat	gaa	aat	gat	atc	tta	tct	864
Ala	Lys	Gly	Ala	Cys	Gln	Asn	Pro	Ser	Asn	Glu	Asn	Asp	Ile	Leu	Ser	
		275					280					285				
ttc	ttt	ttt	gaa	gtt	act	gca	gta	aat	ttt	tta	ttt	ata	aaa	aat	ctt	912
Phe	Phe	Phe	Glu	Val	Thr	Ala	Val	Asn	Phe	Leu	Phe	Ile	Lys	Asn	Leu	
	290					295					300					
caa	aag	cag	caa	tta	gtt	aac	gtt	ggg	tgt	gtt	gta	cgg	cat	gtt	gca	960
Gln	Lys	Gln	Gln	Leu	Val	Asn	Val	Gly	Cys	Val	Val	Arg	His	Val	Ala	
305					310					315					320	
gcg	tta	gaa	agt	tta	atg	cat	tta	tta	agg	ctc	tgc	tac	cca	acg	ttt	1008
Ala	Leu	Glu	Ser	Leu	Met	His	Leu	Leu	Arg	Leu	Cys	Tyr	Pro	Thr	Phe	
				325					330					335		
aag	tta	tat	gag	cta	aat	ttg	gaa	acg	ttg	tcg	cat	att	gca	gag	tcc	1056
Lys	Leu	Tyr	Glu	Leu	Asn	Leu	Glu	Thr	Leu	Ser	His	Ile	Ala	Glu	Ser	
			340					345					350			
cag	gtt	ttt	aac	ttg	ccg	gca	aat	agc	atg	tta	tcg	tta	tca	gta	aat	1104
Gln	Val	Phe	Asn	Leu	Pro	Ala	Asn	Ser	Met	Leu	Ser	Leu	Ser	Val	Asn	
		355					360						365			
gat	caa	gag	gtc	gta	ttt	tca	atg	ttt	aaa	att	gta	tat	aat	aca	cct	1152
Asp	Gln	Glu	Val	Val	Phe	Ser	Met	Phe	Lys	Ile	Val	Tyr	Asn	Thr	Pro	
	370					375					380					
aag	gtt	ggg	ggg	aaa	att	cta	aac	gaa	att	gta	tat	att	act	aat	tac	1200
Lys	Val	Gly	Gly	Lys	Ile	Leu	Asn	Glu	Ile	Val	Tyr	Ile	Thr	Asn	Tyr	
385					390					395					400	
atg	tac	acc	aaa	tac	agt	gaa	aat	tat	cag	cta	acc	aac	aca	ttt	agg	1248
Met	Tyr	Thr	Lys	Tyr	Ser	Glu	Asn	Tyr	Gln	Leu	Thr	Asn	Thr	Phe	Arg	
				405					410					415		

cg	aat	gta	atg	aac	atg	tat	gaa	gtt	tta	aca	aca	att	aaa	tta	aac	1296
Arg	Asn	Val	Met	Asn	Met	Tyr	Glu	Val	Leu	Thr	Thr	Ile	Lys	Leu	Asn	
			420					425					430			
gtc	aca	gat	tct	tct	gtg	ttt	tat	ccg	tat	ata	ttg	ttc	aca	tcc	atg	1344
Val	Thr	Asp	Ser	Ser	Val	Phe	Tyr	Pro	Tyr	Ile	Leu	Phe	Thr	Ser	Met	
			435				440					445				
tgt	aat	aat	gta	gag	ata	tca	tat	atg	att	aat	caa	ata	gca	aag	ccc	1392
Cys	Asn	Asn	Val	Glu	Ile	Ser	Tyr	Met	Ile	Asn	Gln	Ile	Ala	Lys	Pro	
			450				455					460				
gat	gac	atc	acc	ata	ttt	cgc	gtg	ttt	tcg	cct	tgt	ttt	tta	agc	tta	1440
Asp	Asp	Ile	Thr	Ile	Phe	Arg	Val	Phe	Ser	Pro	Cys	Phe	Leu	Ser	Leu	
						470				475					480	
agg	ttt	gat	tta	gat	gaa	aac	aag	cta	cga	tcc	gac	gca	ccg	cag	acg	1488
Arg	Phe	Asp	Leu	Asp	Glu	Asn	Lys	Leu	Arg	Ser	Asp	Ala	Pro	Gln	Thr	
						485			490					495		
tca	aaa	aga	acc	ggc	tcg	gaa	ctg	gca	caa	gga	gcg	tct	ggg	ttt	tgg	1536
Ser	Lys	Arg	Thr	Gly	Ser	Glu	Leu	Ala	Gln	Gly	Ala	Ser	Gly	Phe	Trp	
			500					505					510			
cg	ctg	ttg	cac	gct	ttt	cac	gcc	acg	cgt	ata	aac	gag	ttt	tca	gtc	1584
Arg	Leu	Leu	His	Ala	Phe	His	Ala	Thr	Arg	Ile	Asn	Glu	Phe	Ser	Val	
			515				520					525				
ata	aat	tgt	acc	agg	ctg	gca	tgg	aag	caa	gta	acc	gcg	ctg	atg	ccg	1632
Ile	Asn	Cys	Thr	Arg	Leu	Ala	Trp	Lys	Gln	Val	Thr	Ala	Leu	Met	Pro	
			530				535					540				
ctt	acg	aac	atc	acg	tac	gtc	ata	agc	tcc	gtg	cgc	cct	gat	cac	gct	1680
Leu	Thr	Asn	Ile	Thr	Tyr	Val	Ile	Ser	Ser	Val	Arg	Pro	Asp	His	Ala	
						550				555					560	
cgc	gtt	tac	gag	gtt	tcg	gag	gtg	ttc	ctt	aac	agc	gcg	atg	ttt	gtc	1728
Arg	Val	Tyr	Glu	Val	Ser	Glu	Val	Phe	Leu	Asn	Ser	Ala	Met	Phe	Val	
						565			570					575		
tcg	gcc	gtt	tat	cca	aat	tgt	tct	cat	ttt	aca	ccg	ccc	ggg	acc	gcc	1776
Ser	Ala	Val	Tyr	Pro	Asn	Cys	Ser	His	Phe	Thr	Pro	Pro	Gly	Thr	Ala	
						580			585				590			
cta	cac	att	ccg	ata	ttg	tat	aac	ttt	tcc	gcc	ccg	agg	ata	gga	tgt	1824
Leu	His	Ile	Pro	Ile	Leu	Tyr	Asn	Phe	Ser	Ala	Pro	Arg	Ile	Gly	Cys	
			595				600					605				
ccg	ctg	tgt	gat	tcg	att	gtt	ttg	agc	tat	gat	gag	aac	cag	gga	cta	1872
Pro	Leu	Cys	Asp	Ser	Ile	Val	Leu	Ser	Tyr	Asp	Glu	Asn	Gln	Gly	Leu	
			610				615				620					
cag	acc	atg	atg	tac	gtg	tca	aac	ccc	aca	gtt	caa	gcc	aac	ctg	ttt	1920
Gln	Thr	Met	Met	Tyr	Val	Ser	Asn	Pro	Thr	Val	Gln	Ala	Asn	Leu	Phe	
						630				635					640	
tcc	ccg	tat	tct	cct	ttc	ttt	gac	aac	gat	aat	ttt	cat	atc	cat	tat	1968
Ser	Pro	Tyr	Ser	Pro	Phe	Phe	Asp	Asn	Asp	Asn	Phe	His	Ile	His	Tyr	
						645			650					655		
ttg	tgg	tta	atg	aac	aac	ggg	acc	gtt	gtg	gaa	att	cgg	gga	ttg	tac	2016

Leu Trp Leu Met Asn Asn Gly Thr Val Val Glu Ile Arg Gly Leu Tyr  
660 665 670

aga aga cac gca ctc agt gct att gca tta gta ttt gct ttt att gga 2064  
Arg Arg His Ala Leu Ser Ala Ile Ala Leu Val Phe Ala Phe Ile Gly  
675 680 685

aca atg tct gct ctg tat ttt ctg ttt aag ctg ttt tcc atc ctg gcc 2112  
Thr Met Ser Ala Leu Tyr Phe Leu Phe Lys Leu Phe Ser Ile Leu Ala  
690 695 700

taa 2115

705

<210> 39  
<211> 704  
<212> PRT  
<213> Macaca mulatta rhadinovirus 17577

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Val Thr Asp Lys Tyr Val Tyr Asp Glu Lys Ser Asn Val Glu Leu Glu  
20 25 30  
Phe Asn Gly Thr Ile Tyr Gln Ile Asn Trp Arg Asn Val Ser Lys Glu  
35 40 45  
Leu Thr Ser Ile Val Met Glu Asp Ala Trp Tyr Asp Ser Leu Leu Leu  
50 55 60  
Glu Pro Leu Ser Val Thr Leu Glu Lys Arg Lys Ser Leu Leu Arg Ser  
65 70 75 80  
Ser Ile Val Asn Val His Asn Asn Asp Tyr Thr Phe Cys Lys Ser Ser  
85 90 95  
Ser Asp His Val Ile Asn Leu Thr Val Asp Phe Asn Tyr Ser Ser Leu  
100 105 110  
Pro Gly Phe Thr Gly Asn Phe Asn Val Met Thr His Ala Leu Thr Gln  
115 120 125  
Gly Val Leu Leu Thr Lys Arg Glu Leu Phe Thr Asn Ser Thr Asn Ile  
130 135 140  
Met Asp Leu Phe Tyr Ala Glu Lys Ile Asn Ala Glu Met Phe Lys Ile  
145 150 155 160  
Thr Phe Asp Tyr Ser Asn Val Ile Ile Ser Gly Ile Ile Thr Glu Asn  
165 170 175  
Trp Ile Leu Val Ser Val Thr Asn Ser Ser Val Lys Ser Asn Met Gln  
180 185 190  
Cys Val Ala Leu Leu Phe Gly Val Pro Ser Thr Phe Pro Ala Leu Lys  
195 200 205  
Gly Tyr Val Ser Tyr Arg Asp Leu Leu Val Val Lys Asn Ser Asn Tyr  
210 215 220  
Ala Leu Gly Val Ile Ala Pro Lys Ser Tyr Asn Thr Leu Asp Leu Ala  
225 230 235 240  
Phe Leu Pro Lys Asn Phe Thr Glu Met Phe Val Ser Val Ile Asp Ser  
245 250 255  
Pro Leu Asn Ala Ile Asp Tyr Leu Lys Gly Lys Leu Leu Ala Ile Glu  
260 265 270  
Ala Lys Gly Ala Cys Gln Asn Pro Ser Asn Glu Asn Asp Ile Leu Ser  
275 280 285  
Phe Phe Phe Glu Val Thr Ala Val Asn Phe Leu Phe Ile Lys Asn Leu  
290 295 300  
Gln Lys Gln Gln Leu Val Asn Val Gly Cys Val Val Arg His Val Ala

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305              310              315              320
Ala Leu Glu Ser Leu Met His Leu Leu Arg Leu Cys Tyr Pro Thr Phe
              325              330              335
Lys Leu Tyr Glu Leu Asn Leu Glu Thr Leu Ser His Ile Ala Glu Ser
              340              345              350
Gln Val Phe Asn Leu Pro Ala Asn Ser Met Leu Ser Leu Ser Val Asn
              355              360              365
Asp Gln Glu Val Val Phe Ser Met Phe Lys Ile Val Tyr Asn Thr Pro
              370              375              380
Lys Val Gly Gly Lys Ile Leu Asn Glu Ile Val Tyr Ile Thr Asn Tyr
385              390              395              400
Met Tyr Thr Lys Tyr Ser Glu Asn Tyr Gln Leu Thr Asn Thr Phe Arg
              405              410              415
Arg Asn Val Met Asn Met Tyr Glu Val Leu Thr Thr Ile Lys Leu Asn
              420              425              430
Val Thr Asp Ser Ser Val Phe Tyr Pro Tyr Ile Leu Phe Thr Ser Met
              435              440              445
Cys Asn Asn Val Glu Ile Ser Tyr Met Ile Asn Gln Ile Ala Lys Pro
450              455              460
Asp Asp Ile Thr Ile Phe Arg Val Phe Ser Pro Cys Phe Leu Ser Leu
465              470              475              480
Arg Phe Asp Leu Asp Glu Asn Lys Leu Arg Ser Asp Ala Pro Gln Thr
              485              490              495
Ser Lys Arg Thr Gly Ser Glu Leu Ala Gln Gly Ala Ser Gly Phe Trp
              500              505              510
Arg Leu Leu His Ala Phe His Ala Thr Arg Ile Asn Glu Phe Ser Val
              515              520              525
Ile Asn Cys Thr Arg Leu Ala Trp Lys Gln Val Thr Ala Leu Met Pro
530              535              540
Leu Thr Asn Ile Thr Tyr Val Ile Ser Ser Val Arg Pro Asp His Ala
545              550              555              560
Arg Val Tyr Glu Val Ser Glu Val Phe Leu Asn Ser Ala Met Phe Val
              565              570              575
Ser Ala Val Tyr Pro Asn Cys Ser His Phe Thr Pro Pro Gly Thr Ala
              580              585              590
Leu His Ile Pro Ile Leu Tyr Asn Phe Ser Ala Pro Arg Ile Gly Cys
              595              600              605
Pro Leu Cys Asp Ser Ile Val Leu Ser Tyr Asp Glu Asn Gln Gly Leu
610              615              620
Gln Thr Met Met Tyr Val Ser Asn Pro Thr Val Gln Ala Asn Leu Phe
625              630              635              640
Ser Pro Tyr Ser Pro Phe Phe Asp Asn Asp Asn Phe His Ile His Tyr
              645              650              655
Leu Trp Leu Met Asn Asn Gly Thr Val Val Glu Ile Arg Gly Leu Tyr
              660              665              670
Arg Arg His Ala Leu Ser Ala Ile Ala Leu Val Phe Ala Phe Ile Gly
              675              680              685
Thr Met Ser Ala Leu Tyr Phe Leu Phe Lys Leu Phe Ser Ile Leu Ala
690              695              700

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<210> 40
<211> 1209
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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<220>
<221> CDS
<222> (1)..(1209)

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&lt;400&gt; 40

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Met Ile Lys Ile Ser Asp Leu Lys Ala Arg Leu Val Gly Gly Ala Val	
1 5 10 15	
cag cta tcc aac ggc gag tac gtc tgt cat gtc gtg tac tcg tcg gca	96
Gln Leu Ser Asn Gly Glu Tyr Val Cys His Val Val Tyr Ser Ser Ala	
20 25 30	
ctt gcc gca atg gtc gga ctt ccg gga ccg gcc gta ccc ctt ccc ctg	144
Leu Ala Ala Met Val Gly Leu Pro Gly Pro Ala Val Pro Leu Pro Leu	
35 40 45	
ttg ttt aaa aaa ttc agc acc atc tat tca aac atg atg cca ttg tac	192
Leu Phe Lys Lys Phe Ser Thr Ile Tyr Ser Asn Met Met Pro Leu Tyr	
50 55 60	
gcc cca aaa cgt ccg gaa tta tca atg ctg cga att atg gtg tca ccc	240
Ala Pro Lys Arg Pro Glu Leu Ser Met Leu Arg Ile Met Val Ser Pro	
65 70 75 80	
cat ccc tac gcg cta aac agc tgc ttg tgc gtg gga acg gac gaa ggc	288
His Pro Tyr Ala Leu Asn Ser Cys Leu Cys Val Gly Thr Asp Glu Gly	
85 90 95	
gag aga ggc gta tca ttg ttc aga gac cca gta att aga agt tct gac	336
Glu Arg Gly Val Ser Leu Phe Arg Asp Pro Val Ile Arg Ser Ser Asp	
100 105 110	
ttt gag gac aca cca att acc gta aac tca aaa tta gtg att gcg agt	384
Phe Glu Asp Thr Pro Ile Thr Val Asn Ser Lys Leu Val Ile Ala Ser	
115 120 125	
aac tct ctt ttt ttg cac tgc agg cca ttt tcc gtc ccg gcg acc gtc	432
Asn Ser Leu Phe Leu His Cys Arg Pro Phe Ser Val Pro Ala Thr Val	
130 135 140	
aag acc cca ccg gta act ctt aca aat aac aaa cag ata acc ata aac	480
Lys Thr Pro Pro Val Thr Leu Thr Asn Asn Lys Gln Ile Thr Ile Asn	
145 150 155 160	
gag ctg gca aac acc acg caa gaa tac gat cca aat gcg cca ccg acc	528
Glu Leu Ala Asn Thr Thr Gln Glu Tyr Asp Pro Asn Ala Pro Pro Thr	
165 170 175	
tta tgt agc gcg ctt ccg ccg gat aat aaa aaa ctt cga tcc atc ctc	576
Leu Cys Ser Ala Leu Pro Pro Asp Asn Lys Lys Leu Arg Ser Ile Leu	
180 185 190	
aag caa ccg cca gcg acc agc gag tca aat gta cag tcg gac tgt tta	624
Lys Gln Pro Pro Ala Thr Ser Glu Ser Asn Val Gln Ser Asp Cys Leu	
195 200 205	
ctg gca gac ata ttt ttt gcc atg ggt tcg cgc cag cca caa ata ggc	672
Leu Ala Asp Ile Phe Phe Ala Met Gly Ser Arg Gln Pro Gln Ile Gly	
210 215 220	
gag agc ccg att acc gcg ttt aac acc gtg aca att atg cag gcg gcc	720
Glu Ser Pro Ile Thr Ala Phe Asn Thr Val Thr Ile Met Gln Arg Ala	
225 230 235 240	

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aac aac tct ata atg ttt tta cct aat tta aaa cta aag cct atc caa 768
Asn Asn Ser Ile Met Phe Leu Pro Asn Leu Lys Leu Lys Pro Ile Gln
245 250 255

cac ctt ttt tta aag cac gtc cta ttg cag cgt ttg ggt ttg gaa aat 816
His Leu Phe Leu Lys His Val Leu Leu Gln Arg Leu Gly Leu Glu Asn
260 265 270

att ctg ttt cac ttt aaa atg cta tac gcg aat acg tgt aag gcg gcg 864
Ile Leu Phe His Phe Lys Met Leu Tyr Ala Asn Thr Cys Lys Ala Ala
275 280 285

ggc ccg tat cag aga gaa tac ttc gaa tcc atg ctc tcg cgc gta aaa 912
Gly Pro Tyr Gln Arg Glu Tyr Phe Glu Ser Met Leu Ser Arg Val Lys
290 295 300

cag cgc ctg gaa gac atg gtg ttt tgt tta aac tcc ata gag tcc cac 960
Gln Arg Leu Glu Asp Met Val Phe Cys Leu Asn Ser Ile Glu Ser His
305 310 315 320

gac ttt cag aag gat ttt cga gtt ttg tcg cgg gct ccg cag cga tta 1008
Asp Phe Gln Lys Asp Phe Arg Val Leu Ser Arg Ala Pro Gln Arg Leu
325 330 335

tta acc gcg acc gac aaa tat ttt tta atg ttt cct ccc caa aat cga 1056
Leu Thr Ala Thr Asp Lys Tyr Phe Leu Met Phe Pro Pro Gln Asn Arg
340 345 350

gag ctg gcc att caa gtt ggc gca gag gtg att gaa tca ata tgt gac 1104
Glu Leu Ala Ile Gln Val Gly Ala Glu Val Ile Glu Ser Ile Cys Asp
355 360 365

ggc acg cct cta tcc gag gtt ctc gct aat ctc agt ccc cgc gta acc 1152
Gly Thr Pro Leu Ser Glu Val Leu Ala Asn Leu Ser Pro Arg Val Thr
370 375 380

atc caa aaa gaa acg gga aac aac ctt tta aag ttt tac gct tta tta 1200
Ile Gln Lys Glu Thr Gln Asn Asn Leu Leu Lys Phe Tyr Ala Leu Leu
385 390 395 400

aca gtt tag 1209
Thr Val

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&lt;210&gt; 41

&lt;211&gt; 402

&lt;212&gt; PRT

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 41

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Met Ile Lys Ile Ser Asp Leu Lys Ala Arg Leu Val Gly Gly Ala Val
1 5 10 15
Gln Leu Ser Asn Gly Glu Tyr Val Cys His Val Val Tyr Ser Ser Ala
20 25 30
Leu Ala Ala Met Val Gly Leu Pro Gly Pro Ala Val Pro Leu Pro Leu
35 40 45
Leu Phe Lys Lys Phe Ser Thr Ile Tyr Ser Asn Met Met Pro Leu Tyr
50 55 60
Ala Pro Lys Arg Pro Glu Leu Ser Met Leu Arg Ile Met Val Ser Pro
65 70 75 80
His Pro Tyr Ala Leu Asn Ser Cys Leu Cys Val Gly Thr Asp Glu Gly

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85										90				95			
Glu	Arg	Gly	Val	Ser	Leu	Phe	Arg	Asp	Pro	Val	Ile	Arg	Ser	Ser	Asp		
100										105				110			
Phe	Glu	Asp	Thr	Pro	Ile	Thr	Val	Asn	Ser	Lys	Leu	Val	Ile	Ala	Ser		
115										120				125			
Asn	Ser	Leu	Phe	Leu	His	Cys	Arg	Pro	Phe	Ser	Val	Pro	Ala	Thr	Val		
130										135				140			
Lys	Thr	Pro	Pro	Val	Thr	Leu	Thr	Asn	Asn	Lys	Gln	Ile	Thr	Ile	Asn		
145										150				155			
Glu	Leu	Ala	Asn	Thr	Thr	Gln	Glu	Tyr	Asp	Pro	Asn	Ala	Pro	Pro	Thr		
165										170				175			
Leu	Cys	Ser	Ala	Leu	Pro	Pro	Asp	Asn	Lys	Lys	Leu	Arg	Ser	Ile	Leu		
180										185				190			
Lys	Gln	Pro	Pro	Ala	Thr	Ser	Glu	Ser	Asn	Val	Gln	Ser	Asp	Cys	Leu		
195										200				205			
Leu	Ala	Asp	Ile	Phe	Phe	Ala	Met	Gly	Ser	Arg	Gln	Pro	Gln	Ile	Gly		
210										215				220			
Glu	Ser	Pro	Ile	Thr	Ala	Phe	Asn	Thr	Val	Thr	Ile	Met	Gln	Arg	Ala		
225										230				235			
Asn	Asn	Ser	Ile	Met	Phe	Leu	Pro	Asn	Leu	Lys	Leu	Lys	Pro	Ile	Gln		
245										250				255			
His	Leu	Phe	Leu	Lys	His	Val	Leu	Leu	Gln	Arg	Leu	Gly	Leu	Glu	Asn		
260										265				270			
Ile	Leu	Phe	His	Phe	Lys	Met	Leu	Tyr	Ala	Asn	Thr	Cys	Lys	Ala	Ala		
275										280				285			
Gly	Pro	Tyr	Gln	Arg	Glu	Tyr	Phe	Glu	Ser	Met	Leu	Ser	Arg	Val	Lys		
290										295				300			
Gln	Arg	Leu	Glu	Asp	Met	Val	Phe	Cys	Leu	Asn	Ser	Ile	Glu	Ser	His		
305										310				315			
Asp	Phe	Gln	Lys	Asp	Phe	Arg	Val	Leu	Ser	Arg	Ala	Pro	Gln	Arg	Leu		
325										330				335			
Leu	Thr	Ala	Thr	Asp	Lys	Tyr	Phe	Leu	Met	Phe	Pro	Pro	Gln	Asn	Arg		
340										345				350			
Glu	Leu	Ala	Ile	Gln	Val	Gly	Ala	Glu	Val	Ile	Glu	Ser	Ile	Cys	Asp		
355										360				365			
Gly	Thr	Pro	Leu	Ser	Glu	Val	Leu	Ala	Asn	Leu	Ser	Pro	Arg	Val	Thr		
370										375				380			
Ile	Gln	Lys	Glu	Thr	Gly	Asn	Asn	Leu	Leu	Lys	Phe	Tyr	Ala	Leu	Leu		
385										390				395			
Thr Val														400			

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<210> 42
<211> 2199
<212> DNA
<213> Macaca mulatta rhadinovirus 17577
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<220>  
<221> CDS  
<222> (1) .. (2199)
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atg ctg ttg cag ggc cct gtt ctt ctg ccc gcg tgt cct gct acg gtg 48
Met Leu Leu Gln Gly Pro Val Leu Leu Pro Ala Cys Pro Ala Thr Val
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gca gcg aac gcc ccg tca ccg gcc aat tcc gat ttt aaa act caa ctg 96
Ala Ala Asn Ala Pro Ser Pro Ala Asn Ser Asp Phe Lys Thr Gln Leu
      20              25              30

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gca att ttt tgc tgc ctg gcc acc aat aat gag att ctt gaa aac gtc	144
Ala Ile Phe Cys Cys Leu Ala Thr Asn Asn Glu Ile Leu Glu Asn Val	
35 40 45	
tcg cta gag gcc ttg gac agg gct atg caa aca gag acc acc ttt tac	192
Ser Leu Glu Ala Leu Asp Arg Ala Met Gln Thr Glu Thr Thr Phe Tyr	
50 55 60	
gcg tgc cgt gcg ctc cgg cgt ctg gta ttg gga gaa gga cta tac cct	240
Ala Cys Arg Ala Leu Arg Arg Leu Val Leu Gly Glu Gly Leu Tyr Pro	
65 70 75 80	
ttt ata cac cgc caa ggt ggt atc gtt ggc aag acc ggt aac gag tac	288
Phe Ile His Arg Gln Gly Gly Ile Val Gly Lys Thr Gly Asn Glu Tyr	
85 90 95	
gcg gga ccg ggt tta ata att gat gat gct atc gga tgt aca ttt tcc	336
Ala Gly Pro Gly Leu Ile Ile Asp Asp Ala Ile Gly Cys Thr Phe Ser	
100 105 110	
cat atc gag acg cat acg ttt tta ccc acc gtt ttc acc tac gaa ctg	384
His Ile Glu Thr His Thr Phe Leu Pro Thr Val Phe Thr Tyr Glu Leu	
115 120 125	
tcc gac acg gtt ttg gtt caa agc gac gaa cga atc cta cgg tcg ctg	432
Ser Asp Thr Val Leu Val Gln Ser Asp Glu Arg Ile Leu Arg Ser Leu	
130 135 140	
tac tgt tcg cca tta atg gta tgt ggc gta aat tat caa agc atg ttt	480
Tyr Cys Ser Pro Leu Met Val Cys Gly Val Asn Tyr Gln Ser Met Phe	
145 150 155 160	
cga atc ctc tgt cgt tac ctt caa ata tgg gaa ttc gag gaa tgc ttt	528
Arg Ile Leu Cys Arg Tyr Leu Gln Ile Trp Glu Phe Glu Glu Cys Phe	
165 170 175	
gct gcc ttt acg cgc aca ctg ccg gaa cat ctg atc ggc acg tgt tat	576
Ala Ala Phe Thr Arg Thr Leu Pro Glu His Leu Ile Gly Thr Cys Tyr	
180 185 190	
cag aat tac ttt aaa ctt tta gag cca ttc aaa atc ctc acg cta gct	624
Gln Asn Tyr Phe Lys Leu Leu Glu Pro Phe Lys Ile Leu Thr Leu Ala	
195 200 205	
cgg tgt ccg ccc ccg tgt gca aaa ctg cat ctg aat tac tta aaa ttt	672
Arg Cys Pro Pro Pro Cys Ala Lys Leu His Leu Asn Tyr Leu Lys Phe	
210 215 220	
aac att ttg ggt ttt act tcg gat tgg att tcg cat ccc gaa ctg cat	720
Asn Ile Leu Gly Phe Thr Ser Asp Trp Ile Ser His Pro Glu Leu His	
225 230 235 240	
cgc gtc caa acg gta att att cac aac atc gaa tcc aat ccg gta ctt	768
Arg Val Gln Thr Val Ile Ile His Asn Ile Glu Ser Asn Pro Val Leu	
245 250 255	
tta aaa aac ctc tca aag caa aac aaa ttt cag gac atc aaa gtg gcg	816
Leu Lys Asn Leu Ser Lys Gln Asn Lys Phe Gln Asp Ile Lys Val Ala	
260 265 270	
agc gaa tta atc ata gac tac caa aac ata gta aat caa tcg ctt gac	864

Ser	Glu	Leu	Ile	Ile	Asp	Tyr	Gln	Asn	Ile	Val	Asn	Gln	Ser	Leu	Asp		
		275					280					285					
gta	aat	cta	cag	gtg	aaa	att	aac	aaa	aag	gat	ccc	ggc	aaa	aaa	ccg	912	
Val	Asn	Leu	Gln	Val	Lys	Ile	Asn	Lys	Lys	Asp	Pro	Gly	Lys	Lys	Pro		
		290				295					300						
tac	aag	gta	gtt	gtt	gtg	acg	cca	aag	tca	acg	tac	tat	cta	acg	ttt	960	
Tyr	Lys	Val	Val	Val	Val	Thr	Pro	Lys	Ser	Thr	Tyr	Tyr	Leu	Thr	Phe		
305					310					315					320		
cca	ccc	gag	gta	cca	ata	ttc	cgc	gtc	gca	atg	tgc	atg	tct	gtg	gcg	1008	
Pro	Pro	Glu	Val	Pro	Ile	Phe	Arg	Val	Ala	Met	Cys	Met	Ser	Val	Ala		
			325						330					335			
gaa	cac	gtg	tgc	cat	tcg	tgc	gac	agg	ctg	tat	cct	aac	acc	gag	ttt	1056	
Glu	His	Val	Cys	His	Ser	Cys	Asp	Arg	Leu	Tyr	Pro	Asn	Thr	Glu	Phe		
		340					345					350					
ctg	ggg	cca	ggc	gaa	acg	cct	cgc	gtc	cta	gag	gcc	atg	ttt	tcg	cga	1104	
Leu	Gly	Pro	Gly	Glu	Thr	Pro	Arg	Val	Leu	Glu	Ala	Met	Phe	Ser	Arg		
		355					360				365						
att	caa	tac	gca	cca	aaa	gat	aga	gat	tac	aat	ttt	att	ttt	aac	gcc	1152	
Ile	Gln	Tyr	Ala	Pro	Lys	Asp	Arg	Asp	Tyr	Asn	Phe	Ile	Phe	Asn	Ala		
		370				375					380						
gat	caa	aac	cca	gat	cga	tat	gaa	caa	gcg	cgt	cac	gac	cac	cag	acc	1200	
Asp	Gln	Asn	Pro	Asp	Arg	Tyr	Glu	Gln	Ala	Arg	His	Asp	His	Gln	Thr		
385					390					395					400		
gaa	cct	ctt	cca	gac	atg	ttc	gat	cca	gtt	aag	cac	atg	agt	tta	cac	1248	
Glu	Pro	Leu	Pro	Asp	Met	Phe	Asp	Pro	Val	Lys	His	Met	Ser	Leu	His		
			405						410					415			
aac	ttc	aaa	atc	tca	gtt	ttc	aat	acc	aat	atg	gta	att	aat	acc	aaa	1296	
Asn	Phe	Lys	Ile	Ser	Val	Phe	Asn	Thr	Asn	Met	Val	Ile	Asn	Thr	Lys		
		420					425					430					
atc	acg	tgc	tgg	tct	ctc	gcc	ggg	acc	ttc	gag	tca	att	atc	gac	atc	1344	
Ile	Thr	Cys	Trp	Ser	Leu	Ala	Gly	Thr	Phe	Glu	Ser	Ile	Ile	Asp	Ile		
		435				440					445						
ccc	agg	ctc	act	aata	aac	ttt	gta	atg	aaa	aaa	ttc	tcc	gtg	aaa	gaa	1392	
Pro	Arg	Leu	Thr	Asn	Asn	Phe	Val	Met	Lys	Lys	Phe	Ser	Val	Lys	Glu		
		450				455					460						
ccg	tca	ttc	acc	gtg	agt	gtg	ttc	tac	tcc	gac	aac	ctg	tgc	aac	ggg	1440	
Pro	Ser	Phe	Thr	Val	Ser	Val	Phe	Tyr	Ser	Asp	Asn	Leu	Cys	Asn	Gly		
465					470					475					480		
gct	gca	att	aac	gtt	aac	ata	agc	ggg	gac	atg	ctg	cac	ttt	atg	ttc	1488	
Ala	Ala	Ile	Asn	Val	Asn	Ile	Ser	Gly	Asp	Met	Leu	His	Phe	Met	Phe		
			485						490					495			
gct	atg	gga	aac	ctc	agg	tgc	ttt	tta	ccg	gtg	aag	cac	att	ttc	ccg	1536	
Ala	Met	Gly	Asn	Leu	Arg	Cys	Phe	Leu	Pro	Val	Lys	His	Ile	Phe	Pro		
			500					505					510				
gtt	tcg	att	gcg	aac	tgg	aac	tct	acg	tta	gac	ctc	cac	ggg	ctt	gaa	1584	
Val	Ser	Ile	Ala	Asn	Trp	Asn	Ser	Thr	Leu	Asp	Leu	His	Gly	Leu	Glu		

515	520	525	
aac caa tac ata gtt aga cgg ggg cgg cga gac gtt ttc tgg acc act			1632
Asn Gln Tyr Ile Val Arg Arg Gly Arg Arg Asp Val Phe Trp Thr Thr			
530	535	540	
aat ttc cct tct gtg gtt tct agt aaa gac gga tgc aac gtt tcc tgg			1680
Asn Phe Pro Ser Val Val Ser Ser Lys Asp Gly Cys Asn Val Ser Trp			
545	550	555	560
ttt aag gcg gca act gcg aca att tct aaa ata tac ggt agg ccc tta			1728
Phe Lys Ala Ala Thr Ala Thr Ile Ser Lys Ile Tyr Gly Arg Pro Leu			
	565	570	575
ctt aaa aaa ctt tcg gat gaa ttg aac cca ata tta agc gtt cca tat			1776
Leu Lys Lys Leu Ser Asp Glu Leu Asn Pro Ile Leu Ser Val Pro Tyr			
	580	585	590
gct aga ata gac cag gtg aaa aac aca ata ttc aca acg ctg gag aca			1824
Ala Arg Ile Asp Gln Val Lys Asn Thr Ile Phe Thr Thr Leu Glu Thr			
	595	600	605
aga aat aaa gcg caa ata caa act cta cac aag cgt ttt atc gag tgt			1872
Arg Asn Lys Ala Gln Ile Gln Thr Leu His Lys Arg Phe Ile Glu Cys			
	610	615	620
ttg gtg gaa tgt tgt tcg ttt ttg cgt ttg gat ctg gga gcc ctg aac			1920
Leu Val Glu Cys Cys Ser Phe Leu Arg Leu Asp Leu Gly Ala Leu Asn			
	625	630	635
cgc gcc gcc cgc ctt ggt acg ttt gac ttt tca aaa cgc atc att agt			1968
Arg Ala Ala Arg Leu Gly Thr Phe Asp Phe Ser Lys Arg Ile Ile Ser			
	645	650	655
cac acc aaa agc aaa cac gaa tgc gct att ctg gga tat aaa aaa tgc			2016
His Thr Lys Ser Lys His Glu Cys Ala Ile Leu Gly Tyr Lys Lys Cys			
	660	665	670
aac ctc att cca aag ata tac gtg cga agt aaa aaa ata cgg tta gac			2064
Asn Leu Ile Pro Lys Ile Tyr Val Arg Ser Lys Lys Ile Arg Leu Asp			
	675	680	685
gag tta gga cgc aac gcc aat ttt atg tct ttc ata gct acg acc ggt			2112
Glu Leu Gly Arg Asn Ala Asn Phe Met Ser Phe Ile Ala Thr Thr Gly			
	690	695	700
cac gcg ttt tca aac tta aaa ccg cag gta att cga cac act att aga			2160
His Ala Phe Ser Asn Leu Lys Pro Gln Val Ile Arg His Thr Ile Arg			
	705	710	715
cgt ttg gga ctt cac tgg aga cat aaa gca aaa ata taa			2199
Arg Leu Gly Leu His Trp Arg His Lys Ala Lys Ile			
	725	730	

<210> 43  
 <211> 732  
 <212> PRT  
 <213> Macaca mulatta rhadinovirus 17577

<400> 43

Met	Leu	Leu	Gln	Gly	Pro	Val	Leu	Leu	Pro	Ala	Cys	Pro	Ala	Thr	Val
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Ala	Ala	Asn	Ala	Pro	Ser	Pro	Ala	Asn	Ser	Asp	Phe	Lys	Thr	Gln	Leu
		20						25					30		
Ala	Ile	Phe	Cys	Cys	Leu	Ala	Thr	Asn	Asn	Glu	Ile	Leu	Glu	Asn	Val
	35						40					45			
Ser	Leu	Glu	Ala	Leu	Asp	Arg	Ala	Met	Gln	Thr	Glu	Thr	Thr	Phe	Tyr
	50					55					60				
Ala	Cys	Arg	Ala	Leu	Arg	Arg	Leu	Val	Leu	Gly	Glu	Gly	Leu	Tyr	Pro
	65				70					75					80
Phe	Ile	His	Arg	Gln	Gly	Gly	Ile	Val	Gly	Lys	Thr	Gly	Asn	Glu	Tyr
			85						90					95	
Ala	Gly	Pro	Gly	Leu	Ile	Ile	Asp	Asp	Ala	Ile	Gly	Cys	Thr	Phe	Ser
		100					105						110		
His	Ile	Glu	Thr	His	Thr	Phe	Leu	Pro	Thr	Val	Phe	Thr	Tyr	Glu	Leu
	115						120					125			
Ser	Asp	Thr	Val	Leu	Val	Gln	Ser	Asp	Glu	Arg	Ile	Leu	Arg	Ser	Leu
	130					135					140				
Tyr	Cys	Ser	Pro	Leu	Met	Val	Cys	Gly	Val	Asn	Tyr	Gln	Ser	Met	Phe
	145				150					155					160
Arg	Ile	Leu	Cys	Arg	Tyr	Leu	Gln	Ile	Trp	Glu	Phe	Glu	Glu	Cys	Phe
			165						170					175	
Ala	Ala	Phe	Thr	Arg	Thr	Leu	Pro	Glu	His	Leu	Ile	Gly	Thr	Cys	Tyr
		180						185					190		
Gln	Asn	Tyr	Phe	Lys	Leu	Leu	Glu	Pro	Phe	Lys	Ile	Leu	Thr	Leu	Ala
	195						200					205			
Arg	Cys	Pro	Pro	Pro	Cys	Ala	Lys	Leu	His	Leu	Asn	Tyr	Leu	Lys	Phe
	210					215					220				
Asn	Ile	Leu	Gly	Phe	Thr	Ser	Asp	Trp	Ile	Ser	His	Pro	Glu	Leu	His
	225				230					235					240
Arg	Val	Gln	Thr	Val	Ile	Ile	His	Asn	Ile	Glu	Ser	Asn	Pro	Val	Leu
			245						250					255	
Leu	Lys	Asn	Leu	Ser	Lys	Gln	Asn	Lys	Phe	Gln	Asp	Ile	Lys	Val	Ala
		260						265					270		
Ser	Glu	Leu	Ile	Ile	Asp	Tyr	Gln	Asn	Ile	Val	Asn	Gln	Ser	Leu	Asp
	275						280					285			
Val	Asn	Leu	Gln	Val	Lys	Ile	Asn	Lys	Lys	Asp	Pro	Gly	Lys	Lys	Pro
	290					295					300				
Tyr	Lys	Val	Val	Val	Val	Thr	Pro	Lys	Ser	Thr	Tyr	Tyr	Leu	Thr	Phe
	305					310				315					320
Pro	Pro	Glu	Val	Pro	Ile	Phe	Arg	Val	Ala	Met	Cys	Met	Ser	Val	Ala
			325						330					335	
Glu	His	Val	Cys	His	Ser	Cys	Asp	Arg	Leu	Tyr	Pro	Asn	Thr	Glu	Phe
		340						345					350		
Leu	Gly	Pro	Gly	Glu	Thr	Pro	Arg	Val	Leu	Glu	Ala	Met	Phe	Ser	Arg
	355						360					365			
Ile	Gln	Tyr	Ala	Pro	Lys	Asp	Arg	Asp	Tyr	Asn	Phe	Ile	Phe	Asn	Ala
	370					375					380				
Asp	Gln	Asn	Pro	Asp	Arg	Tyr	Glu	Gln	Ala	Arg	His	Asp	His	Gln	Thr
	385				390					395					400
Glu	Pro	Leu	Pro	Asp	Met	Phe	Asp	Pro	Val	Lys	His	Met	Ser	Leu	His
			405						410					415	
Asn	Phe	Lys	Ile	Ser	Val	Phe	Asn	Thr	Asn	Met	Val	Ile	Asn	Thr	Lys
		420						425					430		
Ile	Thr	Cys	Trp	Ser	Leu	Ala	Gly	Thr	Phe	Glu	Ser	Ile	Ile	Asp	Ile
	435						440					445			
Pro	Arg	Leu	Thr	Asn	Asn	Phe	Val	Met	Lys	Lys	Phe	Ser	Val	Lys	Glu
	450					455					460				
Pro	Ser	Phe	Thr	Val	Ser	Val	Phe	Tyr	Ser	Asp	Asn	Leu	Cys	Asn	Gly
	465				470					475					480
Ala	Ala	Ile	Asn	Val	Asn	Ile	Ser	Gly	Asp	Met	Leu	His	Phe	Met	Phe

				485					490				495				
Ala	Met	Gly	Asn	Leu	Arg	Cys	Phe	Leu	Pro	Val	Lys	His	Ile	Phe	Pro		
			500					505					510				
Val	Ser	Ile	Ala	Asn	Trp	Asn	Ser	Thr	Leu	Asp	Leu	His	Gly	Leu	Glu		
		515					520					525					
Asn	Gln	Tyr	Ile	Val	Arg	Arg	Gly	Arg	Arg	Asp	Val	Phe	Trp	Thr	Thr		
	530					535					540						
Asn	Phe	Pro	Ser	Val	Val	Ser	Ser	Lys	Asp	Gly	Cys	Asn	Val	Ser	Trp		
545					550					555					560		
Phe	Lys	Ala	Ala	Thr	Ala	Thr	Ile	Ser	Lys	Ile	Tyr	Gly	Arg	Pro	Leu		
			565						570					575			
Leu	Lys	Lys	Leu	Ser	Asp	Glu	Leu	Asn	Pro	Ile	Leu	Ser	Val	Pro	Tyr		
			580					585					590				
Ala	Arg	Ile	Asp	Gln	Val	Lys	Asn	Thr	Ile	Phe	Thr	Thr	Leu	Glu	Thr		
		595					600					605					
Arg	Asn	Lys	Ala	Gln	Ile	Gln	Thr	Leu	His	Lys	Arg	Phe	Ile	Glu	Cys		
	610					615					620						
Leu	Val	Glu	Cys	Cys	Ser	Phe	Leu	Arg	Leu	Asp	Leu	Gly	Ala	Leu	Asn		
625					630					635					640		
Arg	Ala	Ala	Arg	Leu	Gly	Thr	Phe	Asp	Phe	Ser	Lys	Arg	Ile	Ile	Ser		
			645						650					655			
His	Thr	Lys	Ser	Lys	His	Glu	Cys	Ala	Ile	Leu	Gly	Tyr	Lys	Lys	Cys		
			660					665					670				
Asn	Leu	Ile	Pro	Lys	Ile	Tyr	Val	Arg	Ser	Lys	Lys	Ile	Arg	Leu	Asp		
	675						680					685					
Glu	Leu	Gly	Arg	Asn	Ala	Asn	Phe	Met	Ser	Phe	Ile	Ala	Thr	Thr	Gly		
	690					695					700						
His	Ala	Phe	Ser	Asn	Leu	Lys	Pro	Gln	Val	Ile	Arg	His	Thr	Ile	Arg		
705					710					715					720		
Arg	Leu	Gly	Leu	His	Trp	Arg	His	Lys	Ala	Lys	Ile						
			725						730								

<210> 44  
 <211> 4137  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
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Met	Glu	Ala	Ala	Leu	Glu	Val	Arg	Pro	Phe	Pro	Tyr	Met	Ala	Thr	Glu		
1				5					10				15				
gcc	aat	ctg	ctt	cgt	caa	atg	aaa	gag	tcg	gca	gcc	agc	gga	ctt	ttt	96	
Ala	Asn	Leu	Leu	Arg	Gln	Met	Lys	Glu	Ser	Ala	Ala	Ser	Gly	Leu	Phe		
			20					25					30				
aaa	agt	ttt	caa	ctg	ctg	ttg	gga	aaa	gac	gcc	agg	gag	gga	gga	gtt	144	
Lys	Ser	Phe	Gln	Leu	Leu	Leu	Gly	Lys	Asp	Ala	Arg	Glu	Gly	Gly	Val		
		35					40					45					
caa	ttt	gag	ggt	ctt	ttg	ggc	gtg	tat	acc	aac	gta	att	cag	ttt	gtg	192	
Gln	Phe	Glu	Gly	Leu	Leu	Gly	Val	Tyr	Thr	Asn	Val	Ile	Gln	Phe	Val		
	50					55					60						
aag	ttt	ctg	gaa	acg	tcg	cta	gcg	gtt	gcg	tgc	gtt	aac	acc	gag	ttt	240	



Lys	Phe	Leu	Glu	Thr	Ser	Leu	Ala	Val	Ala	Cys	Val	Asn	Thr	Glu	Phe	
65					70					75					80	
aag	gac	ctc	aaa	cga	atg	acg	gat	gga	aaa	att	cag	ttt	aag	gta	tct	288
Lys	Asp	Leu	Lys	Arg	Met	Thr	Asp	Gly	Lys	Ile	Gln	Phe	Lys	Val	Ser	
				85					90					95		
gta	ccg	acc	atc	gcg	tat	ggg	gac	ggc	agg	cgg	ccc	aca	aaa	caa	aaa	336
Val	Pro	Thr	Ile	Ala	Tyr	Gly	Asp	Gly	Arg	Arg	Pro	Thr	Lys	Gln	Lys	
			100					105					110			
caa	tac	att	atc	atg	aag	gcc	tgc	aat	aag	cat	cac	att	ggc	gag		384
Gln	Tyr	Ile	Ile	Met	Lys	Ala	Cys	Asn	Lys	His	His	Ile	Gly	Ala	Glu	
		115					120					125				
ata	gag	ctg	tcg	act	gat	gac	atc	gag	ctg	cta	ttc	att	gac	aga	gaa	432
Ile	Glu	Leu	Ser	Thr	Asp	Asp	Ile	Glu	Leu	Leu	Phe	Ile	Asp	Arg	Glu	
	130					135					140					
acc	cca	ctc	gat	tac	aca	gaa	tac	gcc	ggg	gcc	gta	aag	acg	att	acc	480
Thr	Pro	Leu	Asp	Tyr	Thr	Glu	Tyr	Ala	Gly	Ala	Val	Lys	Thr	Ile	Thr	
	145				150					155					160	
gcc	tct	ctc	cag	ttt	ggc	gtg	gac	gcg	ctg	gag	agg	ggc	ctg	gta	gat	528
Ala	Ser	Leu	Gln	Phe	Gly	Val	Asp	Ala	Leu	Glu	Arg	Gly	Leu	Val	Asp	
			165					170					175			
acc	gta	ttg	aat	gtt	aag	ctt	agg	tcc	gcc	ccg	ccg	atg	ttt	att	cta	576
Thr	Val	Leu	Asn	Val	Lys	Leu	Arg	Ser	Ala	Pro	Pro	Met	Phe	Ile	Leu	
			180					185					190			
aaa	aca	cta	tca	gac	ccg	gtc	tac	acc	gaa	cgg	ggc	cta	aag	aag	gct	624
Lys	Thr	Leu	Ser	Asp	Pro	Val	Tyr	Thr	Glu	Arg	Gly	Leu	Lys	Lys	Ala	
		195				200						205				
gtt	aag	tca	gac	atg	gtg	tcc	atg	ttc	aaa	agc	tac	ctt	atg	gat	aac	672
Val	Lys	Ser	Asp	Met	Val	Ser	Met	Phe	Lys	Ser	Tyr	Leu	Met	Asp	Asn	
	210				215						220					
tcg	ttt	ttc	ctc	gac	aaa	tca	gac	atc	gcc	gtc	aag	gga	aag	cag	tac	720
Ser	Phe	Phe	Leu	Asp	Lys	Ser	Asp	Ile	Ala	Val	Lys	Gly	Lys	Gln	Tyr	
	225				230					235				240		
gtg	ctg	tcg	gtt	ctc	tcc	gac	atg	gtg	ggg	gcg	gtg	tgt	cac	gaa	acg	768
Val	Leu	Ser	Val	Leu	Ser	Asp	Met	Val	Gly	Ala	Val	Cys	His	Glu	Thr	
			245					250						255		
gtt	ttt	aag	ggg	acg	aat	acg	tat	ctg	tct	gca	tcg	gga	gag	cca	att	816
Val	Phe	Lys	Gly	Thr	Asn	Thr	Tyr	Leu	Ser	Ala	Ser	Gly	Glu	Pro	Ile	
			260					265					270			
gcc	gga	gtc	atg	gag	acc	acg	gaa	aac	gta	atg	cga	aaa	ctg	tta	aac	864
Ala	Gly	Val	Met	Glu	Thr	Thr	Glu	Asn	Val	Met	Arg	Lys	Leu	Leu	Asn	
		275					280					285				
atg	cta	ggc	cag	gtt	gac	ggg	ggc	atg	tcc	ggc	ccg	gcg	tct	tac	gcc	912
Met	Leu	Gly	Gln	Val	Asp	Gly	Gly	Met	Ser	Gly	Pro	Ala	Ser	Tyr	Ala	
	290					295					300					
aat	tac	gtt	gtc	agg	ggc	gaa	aat	ctc	gta	acc	gcc	gtg	acg	tac	ggc	960
Asn	Tyr	Val	Val	Arg	Gly	Glu	Asn	Leu	Val	Thr	Ala	Val	Thr	Tyr	Gly	

305	310	315	320	
cgc gtc atg cga acg ttt gac cag ttc atg aaa cgc ata gtg gac cgt				1008
Arg Val Met Arg Thr Phe Asp Gln Phe Met Lys Arg Ile Val Asp Arg				
	325	330	335	
ccc aac gcg cag ccc agc gtc gac gat gat cgg gac gcg gtg gcg gac				1056
Pro Asn Ala Gln Pro Ser Val Asp Asp Asp Arg Asp Ala Val Ala Asp				
	340	345	350	
ggg cag gac tcc ctc gcc aaa aca ccg atc gcg gcg gct gtt atc cag				1104
Gly Gln Asp Ser Leu Ala Lys Thr Pro Ile Ala Ala Ala Val Ile Gln				
	355	360	365	
att gga gat aaa ctg gtg gct ttg gaa agt tta cag cga atg tac aac				1152
Ile Gly Asp Lys Leu Val Ala Leu Glu Ser Leu Gln Arg Met Tyr Asn				
	370	375	380	
gag acc cag ttt ccc ttc ccg tta aac agg cgt atg cac tat act tat				1200
Glu Thr Gln Phe Pro Phe Pro Leu Asn Arg Arg Met His Tyr Thr Tyr				
	385	390	395	400
ttt ttc ccc att ggg ttg cac atg ccc cgt cct cag tat tcc acg tcg				1248
Phe Phe Pro Ile Gly Leu His Met Pro Arg Pro Gln Tyr Ser Thr Ser				
	405	410	415	
gcc aca att aag ggg gtc gag cac cca gcg gaa caa tcc gtc gaa acg				1296
Ala Thr Ile Lys Gly Val Glu His Pro Ala Glu Gln Ser Val Glu Thr				
	420	425	430	
tgg att gta aat aaa aac aac gta ctg ctg agt ttc aat tat caa aac				1344
Trp Ile Val Asn Lys Asn Asn Val Leu Leu Ser Phe Asn Tyr Gln Asn				
	435	440	445	
gcg ctc aag tcc atc tgt cat ccg cgc atg cac aac ccg atg ccg tgt				1392
Ala Leu Lys Ser Ile Cys His Pro Arg Met His Asn Pro Met Pro Cys				
	450	455	460	
ggg caa gct ttg ggt cag gcg ttt cca gat ccc gga cac gtt cac agg				1440
Gly Gln Ala Leu Gly Gln Ala Phe Pro Asp Pro Gly His Val His Arg				
	465	470	475	480
tac gga caa aga tct gag cac ccc ccg aac atg aac cta tac ggg ctg				1488
Tyr Gly Gln Arg Ser Glu His Pro Pro Asn Met Asn Leu Tyr Gly Leu				
	485	490	495	
gtg tac aac tat tac cag ggc aaa aac gtg gca cac gtt ccg gat gtc				1536
Val Tyr Asn Tyr Tyr Gln Gly Lys Asn Val Ala His Val Pro Asp Val				
	500	505	510	
gcc cta aag gcg acg atg acc aca gat gag ttg ctg cac cca acc tcg				1584
Ala Leu Lys Ala Thr Met Thr Thr Asp Glu Leu Leu His Pro Thr Ser				
	515	520	525	
cac gag acg ctt cgt ttg gag gtt cac ccg atg ttt gat ttt ttc gtt				1632
His Glu Thr Leu Arg Leu Glu Val His Pro Met Phe Asp Phe Phe Val				
	530	535	540	
cat cag cag cct ggt gcg caa gcc gcg tat agg gcg acc cac agg act				1680
His Gln Gln Pro Gly Ala Gln Ala Ala Tyr Arg Ala Thr His Arg Thr				
	545	550	555	560

atg gtg ggt aac att cca caa ccc ctg gcg ccc aac gag ttt caa aac	1728
Met Val Gly Asn Ile Pro Gln Pro Leu Ala Pro Asn Glu Phe Gln Asn	
565 570 575	
agc aga ggc ctg cag ttt gac aga gcg gcg gcc gtg gct cac gtg ctg	1776
Ser Arg Gly Leu Gln Phe Asp Arg Ala Ala Ala Val Ala His Val Leu	
580 585 590	
gac cag tca acg atg gaa att atc caa gat acg gcg ttt gac acg tcg	1824
Asp Gln Ser Thr Met Glu Ile Ile Gln Asp Thr Ala Phe Asp Thr Ser	
595 600 605	
tac cca cta ctc tgt tat gtc atc gaa tgc ctc att cac gga cag gaa	1872
Tyr Pro Leu Leu Cys Tyr Val Ile Glu Cys Leu Ile His Gly Gln Glu	
610 615 620	
gac aaa ttt ttg att aat tct cct tta att gca tta acc att gaa act	1920
Asp Lys Phe Leu Ile Asn Ser Pro Leu Ile Ala Leu Thr Ile Glu Thr	
625 630 635 640	
tac tgg aac aat gcc gga aaa ctg gcg ttt att aac agc ttc cct atg	1968
Tyr Trp Asn Asn Ala Gly Lys Leu Ala Phe Ile Asn Ser Phe Pro Met	
645 650 655	
ctg cga ttt atc tgc gtt cac ctg ggc aac ggt agt att tct aag gac	2016
Leu Arg Phe Ile Cys Val His Leu Gly Asn Gly Ser Ile Ser Lys Asp	
660 665 670	
gtg tac gcc cat tac cga aaa gtt ttt ggc gaa ctc gtg gtt ttg cag	2064
Val Tyr Ala His Tyr Arg Lys Val Phe Gly Glu Leu Val Val Leu Gln	
675 680 685	
cag gcg ctc tcg aaa atc gcg ggc cac gag gtg gtg ggg cgc agg ccc	2112
Gln Ala Leu Ser Lys Ile Ala Gly His Glu Val Val Gly Arg Arg Pro	
690 695 700	
gcg tcc gag ctg att aac tgt ctt cag gac ccc aat ctt ttg ccg ccc	2160
Ala Ser Glu Leu Ile Asn Cys Leu Gln Asp Pro Asn Leu Leu Pro Pro	
705 710 715 720	
ttt gct tac aat gac gtt ttt acc aac ctg ctc agg cag tcc tcg cgg	2208
Phe Ala Tyr Asn Asp Val Phe Thr Asn Leu Leu Arg Gln Ser Ser Arg	
725 730 735	
cac ccc atg gta ctc ata ggc gac gag ggg tac gaa acg gaa aat gac	2256
His Pro Met Val Leu Ile Gly Asp Glu Gly Tyr Glu Thr Glu Asn Asp	
740 745 750	
agg gat acg tac atc aac gtc aga gga aaa atg gag gac cta gtc ggt	2304
Arg Asp Thr Tyr Ile Asn Val Arg Gly Lys Met Glu Asp Leu Val Gly	
755 760 765	
gac atg gtt aac att tac gag acc aga aac aac gcg gat cat gac ggc	2352
Asp Met Val Asn Ile Tyr Glu Thr Arg Asn Asn Ala Asp His Asp Gly	
770 775 780	
cgc cac gtc ctt gac gtc ggt ccc ttt aat gaa aac gaa cag cac atg	2400
Arg His Val Leu Asp Val Gly Pro Phe Asn Glu Asn Glu Gln His Met	
785 790 795 800	

gct gtg ctg gaa aag ctt ttt tat tac gtg gtt ctg cca gcc tgt acc	2448
Ala Val Leu Glu Lys Leu Phe Tyr Tyr Val Val Leu Pro Ala Cys Thr	
805 810 815	
aac ggt cac gtc tgc ggc atg ggc gtc gat ttt gac aac gtg gcc ctg	2496
Asn Gly His Val Cys Gly Met Gly Val Asp Phe Asp Asn Val Ala Leu	
820 825 830	
gcc ctg acg tac aac ggc cca gtg ttt gct gac gtc gtg aac ccc gac	2544
Ala Leu Thr Tyr Asn Gly Pro Val Phe Ala Asp Val Val Asn Pro Asp	
835 840 845	
gat gag att ttg gac cac ctg gag aac ggg acg ctc cgc gag atg ctc	2592
Asp Glu Ile Leu Asp His Leu Glu Asn Gly Thr Leu Arg Glu Met Leu	
850 855 860	
gag gct tcg gat ata cac ccc acc gtt gac atg att cga act ctt tgc	2640
Glu Ala Ser Asp Ile His Pro Thr Val Asp Met Ile Arg Thr Leu Cys	
865 870 875 880	
acg tcg ttt ctc acc tgc ccg ttt gtt acc cag gcc tcc cgt gtt gtg	2688
Thr Ser Phe Leu Thr Cys Pro Phe Val Thr Gln Ala Ser Arg Val Val	
885 890 895	
act cag cgg gac ccc gcg caa ctg ttg acc act cac gac gac ggg aga	2736
Thr Gln Arg Asp Pro Ala Gln Leu Leu Thr Thr His Asp Asp Gly Arg	
900 905 910	
tac gtg agc cag act gtc ctc gtt aac ggg ttc gcg gcg ttt gct atc	2784
Tyr Val Ser Gln Thr Val Leu Val Asn Gly Phe Ala Ala Phe Ala Ile	
915 920 925	
gca gat agg tct cgt gac gtt gcc gag acc atg ttt tac ccg gtg ccg	2832
Ala Asp Arg Ser Arg Asp Val Ala Glu Thr Met Phe Tyr Pro Val Pro	
930 935 940	
ttc acc aag ctg tac agc gat ccc ctg gtg gcg gcc acg ctc cac ccg	2880
Phe Thr Lys Leu Tyr Ser Asp Pro Leu Val Ala Ala Thr Leu His Pro	
945 950 955 960	
ctg gtc gca aat tac gtg acg cgc ctg ccg gcc cag cgc gtg ccg gtc	2928
Leu Val Ala Asn Tyr Val Thr Arg Leu Pro Ala Gln Arg Val Pro Val	
965 970 975	
gcg ttt aac gtc ccc ccg gcc ctc atg gcc gag tac gag gag tgg cac	2976
Ala Phe Asn Val Pro Pro Ala Leu Met Ala Glu Tyr Glu Glu Trp His	
980 985 990	
aag tct cca atg ctg gcc tac gct aac acc tgc ccg atg acg ccc acg	3024
Lys Ser Pro Met Leu Ala Tyr Ala Asn Thr Cys Pro Met Thr Pro Thr	
995 1000 1005	
tcg ttg agc acc ctg gcg agc atg cac atg aag ctg tcc gcg ccg ggg	3072
Ser Leu Ser Thr Leu Ala Ser Met His Met Lys Leu Ser Ala Pro Gly	
1010 1015 1020	
ttc atc tgc cac gca aag cac aag att cac ccg ggc ttt gcg atg acc	3120
Phe Ile Cys His Ala Lys His Lys Ile His Pro Gly Phe Ala Met Thr	
1025 1030 1035 1040	
gcc gtc cga acc gat gag gtg ttg gcg gag aac ttg cta ttt agt gcc	3168

Ala Val Arg Thr Asp Glu Val Leu Ala Glu Asn Leu Leu Phe Ser Ala	
1045 1050 1055	
agg gcc tcg acg tcc atg ttt tta ggg cag cca tcg gtt atg cgt cgg	3216
Arg Ala Ser Thr Ser Met Phe Leu Gly Gln Pro Ser Val Met Arg Arg	
1060 1065 1070	
gaa gtc agg gcg gac gca gtc acg ttt gag gtg aat cat gag ttg gca	3264
Glu Val Arg Ala Asp Ala Val Thr Phe Glu Val Asn His Glu Leu Ala	
1075 1080 1085	
tcg ctg gac atg gcg ctc ggt tat tct tcc acc atc acg ccc gcc cac	3312
Ser Leu Asp Met Ala Leu Gly Tyr Ser Ser Thr Ile Thr Pro Ala His	
1090 1095 1100	
gtt gcg gcg att acc tcg gac atg ggc gtt cac tgt cag gac atg ttt	3360
Val Ala Ala Ile Thr Ser Asp Met Gly Val His Cys Gln Asp Met Phe	
1105 1110 1115 1120	
ctc atg ttt ccc ggg gac tcg tac cag gac agg acc ctc aac gac tac	3408
Leu Met Phe Pro Gly Asp Ser Tyr Gln Asp Arg Thr Leu Asn Asp Tyr	
1125 1130 1135	
gtt aaa caa aaa gcc gga tgc caa cga ttc ggt ggt cct ggc cag att	3456
Val Lys Gln Lys Ala Gly Cys Gln Arg Phe Gly Gly Pro Gly Gln Ile	
1140 1145 1150	
cgt gag ccc gtc gct tac gtt gcg ggg gtg ccg cac tcg gac aac ata	3504
Arg Glu Pro Val Ala Tyr Val Ala Gly Val Pro His Ser Asp Asn Ile	
1155 1160 1165	
ccg ggt ctc agc cac gga cag ctg gcc acg tgt gag att gtt ttg acg	3552
Pro Gly Leu Ser His Gly Gln Leu Ala Thr Cys Glu Ile Val Leu Thr	
1170 1175 1180	
ccc gtt act gca gac gtt acc tat ttt caa acc ccc aac agt ccc cgg	3600
Pro Val Thr Ala Asp Val Thr Tyr Phe Gln Thr Pro Asn Ser Pro Arg	
1185 1190 1195 1200	
gga cgg gca tcc tgc gtg atc tcg tgt gac gcg tac aac aac gaa agc	3648
Gly Arg Ala Ser Cys Val Ile Ser Cys Asp Ala Tyr Asn Asn Glu Ser	
1205 1210 1215	
gcg gaa cgt ttg ctc ttt gac cac tcc atc ccg gat tct gcc tac gaa	3696
Ala Glu Arg Leu Leu Phe Asp His Ser Ile Pro Asp Ser Ala Tyr Glu	
1220 1225 1230	
tac cgc act acg gtt aac cca tgg gcg tcg cag cag ggc tcc ctc gga	3744
Tyr Arg Thr Thr Val Asn Pro Trp Ala Ser Gln Gln Gly Ser Leu Gly	
1235 1240 1245	
gac gtg ctg tac aac tca acc tcg cgc cag gtc gca gtg cca ggg atg	3792
Asp Val Leu Tyr Asn Ser Thr Ser Arg Gln Val Ala Val Pro Gly Met	
1250 1255 1260	
tac agt ccg tgt cgc cag ttt ttc cac aag gac gct att ttg cgt aac	3840
Tyr Ser Pro Cys Arg Gln Phe Phe His Lys Asp Ala Ile Leu Arg Asn	
1265 1270 1275 1280	
aat cgg ggc ctg aac aca cta gtc acg gaa tac gcg gcc cgc ctc acg	3888
Asn Arg Gly Leu Asn Thr Leu Val Thr Glu Tyr Ala Ala Arg Leu Thr	

1285	1290	1295	
gga acg ccg gcg acc agc gcg acg gac ctg cag tac gtg gtg gtc aac			3936
Gly Thr Pro Ala Thr Ser Ala Thr Asp Leu Gln Tyr Val Val Val Asn			
1300	1305	1310	
gga acg gat gtg ttt cta gaa caa ccg tgc cag ttt cta caa gaa gcg			3984
Gly Thr Asp Val Phe Leu Glu Gln Pro Cys Gln Phe Leu Gln Glu Ala			
1315	1320	1325	
ttt ccc acg ctc gcc gcc agt cac agg tct ctg ctg gac gaa tat atg			4032
Phe Pro Thr Leu Ala Ala Ser His Arg Ser Leu Leu Asp Glu Tyr Met			
1330	1335	1340	
tcg aat aag ctc acg cac gcc cct gtg cac atg gga cat tat atg att			4080
Ser Asn Lys Leu Thr His Ala Pro Val His Met Gly His Tyr Met Ile			
1345	1350	1355	1360
gag gaa gtg gcc cct atg aaa aga cta tta aag atc gga aac aag gtc			4128
Glu Glu Val Ala Pro Met Lys Arg Leu Leu Lys Ile Gly Asn Lys Val			
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gcc tat tag			4137
Ala Tyr			

<210> 45  
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 <212> PRT  
 <213> Macaca mulatta rhadinovirus 17577

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 Lys Ser Phe Gln Leu Leu Leu Gly Lys Asp Ala Arg Glu Gly Gly Val  
 35 40 45  
 Gln Phe Glu Gly Leu Leu Gly Val Tyr Thr Asn Val Ile Gln Phe Val  
 50 55 60  
 Lys Phe Leu Glu Thr Ser Leu Ala Val Ala Cys Val Asn Thr Glu Phe  
 65 70 75 80  
 Lys Asp Leu Lys Arg Met Thr Asp Gly Lys Ile Gln Phe Lys Val Ser  
 85 90 95  
 Val Pro Thr Ile Ala Tyr Gly Asp Gly Arg Arg Pro Thr Lys Gln Lys  
 100 105 110  
 Gln Tyr Ile Ile Met Lys Ala Cys Asn Lys His His Ile Gly Ala Glu  
 115 120 125  
 Ile Glu Leu Ser Thr Asp Asp Ile Glu Leu Leu Phe Ile Asp Arg Glu  
 130 135 140  
 Thr Pro Leu Asp Tyr Thr Glu Tyr Ala Gly Ala Val Lys Thr Ile Thr  
 145 150 155 160  
 Ala Ser Leu Gln Phe Gly Val Asp Ala Leu Glu Arg Gly Leu Val Asp  
 165 170 175  
 Thr Val Leu Asn Val Lys Leu Arg Ser Ala Pro Pro Met Phe Ile Leu  
 180 185 190  
 Lys Thr Leu Ser Asp Pro Val Tyr Thr Glu Arg Gly Leu Lys Lys Ala  
 195 200 205  
 Val Lys Ser Asp Met Val Ser Met Phe Lys Ser Tyr Leu Met Asp Asn  
 210 215 220  
 Ser Phe Phe Leu Asp Lys Ser Asp Ile Ala Val Lys Gly Lys Gln Tyr

225					230					235				240	
Val	Leu	Ser	Val	Leu	Ser	Asp	Met	Val	Gly	Ala	Val	Cys	His	Glu	Thr
				245					250					255	
Val	Phe	Lys	Gly	Thr	Asn	Thr	Tyr	Leu	Ser	Ala	Ser	Gly	Glu	Pro	Ile
			260					265					270		
Ala	Gly	Val	Met	Glu	Thr	Thr	Glu	Asn	Val	Met	Arg	Lys	Leu	Leu	Asn
		275					280					285			
Met	Leu	Gly	Gln	Val	Asp	Gly	Gly	Met	Ser	Gly	Pro	Ala	Ser	Tyr	Ala
	290					295					300				
Asn	Tyr	Val	Val	Arg	Gly	Glu	Asn	Leu	Val	Thr	Ala	Val	Thr	Tyr	Gly
305					310					315				320	
Arg	Val	Met	Arg	Thr	Phe	Asp	Gln	Phe	Met	Lys	Arg	Ile	Val	Asp	Arg
			325					330						335	
Pro	Asn	Ala	Gln	Pro	Ser	Val	Asp	Asp	Asp	Arg	Asp	Ala	Val	Ala	Asp
		340						345				350			
Gly	Gln	Asp	Ser	Leu	Ala	Lys	Thr	Pro	Ile	Ala	Ala	Ala	Val	Ile	Gln
	355						360					365			
Ile	Gly	Asp	Lys	Leu	Val	Ala	Leu	Glu	Ser	Leu	Gln	Arg	Met	Tyr	Asn
	370					375					380				
Glu	Thr	Gln	Phe	Pro	Phe	Pro	Leu	Asn	Arg	Arg	Met	His	Tyr	Thr	Tyr
385					390					395				400	
Phe	Phe	Pro	Ile	Gly	Leu	His	Met	Pro	Arg	Pro	Gln	Tyr	Ser	Thr	Ser
			405						410					415	
Ala	Thr	Ile	Lys	Gly	Val	Glu	His	Pro	Ala	Glu	Gln	Ser	Val	Glu	Thr
		420						425					430		
Trp	Ile	Val	Asn	Lys	Asn	Asn	Val	Leu	Leu	Ser	Phe	Asn	Tyr	Gln	Asn
	435					440						445			
Ala	Leu	Lys	Ser	Ile	Cys	His	Pro	Arg	Met	His	Asn	Pro	Met	Pro	Cys
	450					455					460				
Gly	Gln	Ala	Leu	Gly	Gln	Ala	Phe	Pro	Asp	Pro	Gly	His	Val	His	Arg
465					470					475				480	
Tyr	Gly	Gln	Arg	Ser	Glu	His	Pro	Pro	Asn	Met	Asn	Leu	Tyr	Gly	Leu
			485						490					495	
Val	Tyr	Asn	Tyr	Tyr	Gln	Gly	Lys	Asn	Val	Ala	His	Val	Pro	Asp	Val
		500						505					510		
Ala	Leu	Lys	Ala	Thr	Met	Thr	Thr	Asp	Glu	Leu	Leu	His	Pro	Thr	Ser
	515						520					525			
His	Glu	Thr	Leu	Arg	Leu	Glu	Val	His	Pro	Met	Phe	Asp	Phe	Phe	Val
	530					535					540				
His	Gln	Gln	Pro	Gly	Ala	Gln	Ala	Ala	Tyr	Arg	Ala	Thr	His	Arg	Thr
545					550					555				560	
Met	Val	Gly	Asn	Ile	Pro	Gln	Pro	Leu	Ala	Pro	Asn	Glu	Phe	Gln	Asn
			565						570					575	
Ser	Arg	Gly	Leu	Gln	Phe	Asp	Arg	Ala	Ala	Ala	Val	Ala	His	Val	Leu
		580						585					590		
Asp	Gln	Ser	Thr	Met	Glu	Ile	Ile	Gln	Asp	Thr	Ala	Phe	Asp	Thr	Ser
	595					600						605			
Tyr	Pro	Leu	Leu	Cys	Tyr	Val	Ile	Glu	Cys	Leu	Ile	His	Gly	Gln	Glu
	610					615					620				
Asp	Lys	Phe	Leu	Ile	Asn	Ser	Pro	Leu	Ile	Ala	Leu	Thr	Ile	Glu	Thr
625					630					635				640	
Tyr	Trp	Asn	Asn	Ala	Gly	Lys	Leu	Ala	Phe	Ile	Asn	Ser	Phe	Pro	Met
		645							650					655	
Leu	Arg	Phe	Ile	Cys	Val	His	Leu	Gly	Asn	Gly	Ser	Ile	Ser	Lys	Asp
	660							665					670		
Val	Tyr	Ala	His	Tyr	Arg	Lys	Val	Phe	Gly	Glu	Leu	Val	Val	Leu	Gln
	675						680					685			
Gln	Ala	Leu	Ser	Lys	Ile	Ala	Gly	His	Glu	Val	Val	Gly	Arg	Arg	Pro
	690					695					700				
Ala	Ser	Glu	Leu	Ile	Asn	Cys	Leu	Gln	Asp	Pro	Asn	Leu	Leu	Pro	Pro
705					710					715				720	





1205 1210 1215  
 Ala Glu Arg Leu Leu Phe Asp His Ser Ile Pro Asp Ser Ala Tyr Glu  
 1220 1225 1230  
 Tyr Arg Thr Thr Val Asn Pro Trp Ala Ser Gln Gln Gly Ser Leu Gly  
 1235 1240 1245  
 Asp Val Leu Tyr Asn Ser Thr Ser Arg Gln Val Ala Val Pro Gly Met  
 1250 1255 1260  
 Tyr Ser Pro Cys Arg Gln Phe Phe His Lys Asp Ala Ile Leu Arg Asn  
 1265 1270 1275 1280  
 Asn Arg Gly Leu Asn Thr Leu Val Thr Glu Tyr Ala Ala Arg Leu Thr  
 1285 1290 1295  
 Gly Thr Pro Ala Thr Ser Ala Thr Asp Leu Gln Tyr Val Val Val Asn  
 1300 1305 1310  
 Gly Thr Asp Val Phe Leu Glu Gln Pro Cys Gln Phe Leu Gln Glu Ala  
 1315 1320 1325  
 Phe Pro Thr Leu Ala Ala Ser His Arg Ser Leu Leu Asp Glu Tyr Met  
 1330 1335 1340  
 Ser Asn Lys Leu Thr His Ala Pro Val His Met Gly His Tyr Met Ile  
 1345 1350 1355 1360  
 Glu Glu Val Ala Pro Met Lys Arg Leu Leu Lys Ile Gly Asn Lys Val  
 1365 1370 1375  
 Ala Tyr

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 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

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 gcc gac gag ata gca aat ctt cag tca aag ata gga tgc att ttg cct 96  
 Ala Asp Glu Ile Ala Asn Leu Gln Ser Lys Ile Gly Cys Ile Leu Pro  
 20 25 30  
 ctc aga gac gcc cac cgt ctg cag aat ata cag gcg ctg ggt ctg ggg 144  
 Leu Arg Asp Ala His Arg Leu Gln Asn Ile Gln Ala Leu Gly Leu Gly  
 35 40 45  
 aac ctg tgc tct agg gat tcc gcg gtg gat ttt att cag gca tat cac 192  
 Asn Leu Cys Ser Arg Asp Ser Ala Val Asp Phe Ile Gln Ala Tyr His  
 50 55 60  
 tat ttg gac aaa tgc act ctc gcc gtg ttg gaa gag gtc ggt ccc aac 240  
 Tyr Leu Asp Lys Cys Thr Leu Ala Val Leu Glu Glu Val Gly Pro Asn  
 65 70 75 80  
 agt tta cgg cta acg cgc att gat ccc atg gac aat tat caa ata aaa 288  
 Ser Leu Arg Leu Thr Arg Ile Asp Pro Met Asp Asn Tyr Gln Ile Lys  
 85 90 95  
 aac gcg tac caa ccg gcc ttc cat tgg gat aac tac tca gaa ttg gta 336  
 Asn Ala Tyr Gln Pro Ala Phe His Trp Asp Asn Tyr Ser Glu Leu Val

100	105	110	
gtt ata cca ccg gtc ttt ggg cgc aaa gat gcg acc gtc tca ctg gag			384
Val Ile Pro Pro Val Phe Gly Arg Lys Asp Ala Thr Val Ser Leu Glu			
115	120	125	
tct aac ggg ttt gat gtg gtt ttc cct gcc gtg gtg cca gaa cca ctg			432
Ser Asn Gly Phe Asp Val Val Phe Pro Ala Val Val Pro Glu Pro Leu			
130	135	140	
gct caa aca gtg ctt cag aag ctg ctg ctg tat aac ata tac tac aga			480
Ala Gln Thr Val Leu Gln Lys Leu Leu Leu Tyr Asn Ile Tyr Tyr Arg			
145	150	155	160
gtg gcg gag acg acg ccc acc gac gtc aac cta gcc gag gtg acg ctg			528
Val Ala Glu Thr Thr Pro Thr Asp Val Asn Leu Ala Glu Val Thr Leu			
	165	170	175
tac acg acc aat atc act tac atg ggt cgc aac tac gcc ctg gac gtg			576
Tyr Thr Thr Asn Ile Thr Tyr Met Gly Arg Asn Tyr Ala Leu Asp Val			
	180	185	190
gac ccc gtt ggg tcg agc tca gct atg cgg atg ctg gac gac ctg tcc			624
Asp Pro Val Gly Ser Ser Ser Ala Met Arg Met Leu Asp Asp Leu Ser			
	195	200	205
att tac ctg tgc gtt ttg tcc gcg tta att ccg cgc ggg tgc gta agg			672
Ile Tyr Leu Cys Val Leu Ser Ala Leu Ile Pro Arg Gly Cys Val Arg			
	210	215	220
cta ctg acc tca ttg gtg cgc cac aac aaa cac gaa tta gtc gag att			720
Leu Leu Thr Ser Leu Val Arg His Asn Lys His Glu Leu Val Glu Ile			
	225	230	235
ttc gag ggg gtg gtg cca cct gag gta cag gcc ctg gat ctc aac aac			768
Phe Glu Gly Val Val Pro Pro Glu Val Gln Ala Leu Asp Leu Asn Asn			
	245	250	255
gta agc gtg gcc gac gac ata acg cgc atg ggt gcc ctc ata acc tat			816
Val Ser Val Ala Asp Asp Ile Thr Arg Met Gly Ala Leu Ile Thr Tyr			
	260	265	270
cta cga agt ctc agt tct ata ttt aat ctg ggc cgc aga ttt cac gtt			864
Leu Arg Ser Leu Ser Ser Ile Phe Asn Leu Gly Arg Arg Phe His Val			
	275	280	285
tac gcg ttc tca tcg gac acg aat acc gct tcc tgt tgg tgt gca tat			912
Tyr Ala Phe Ser Ser Asp Thr Asn Thr Ala Ser Cys Trp Cys Ala Tyr			
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aac tag			918
Asn			
305			

<210> 47  
 <211> 305  
 <212> PRT  
 <213> Macaca mulatta rhadinovirus 17577

<400> 47

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Leu Arg Asp Ala His Arg Leu Gln Asn Ile Gln Ala Leu Gly Leu Gly
          35           40           45
Asn Leu Cys Ser Arg Asp Ser Ala Val Asp Phe Ile Gln Ala Tyr His
          50           55           60
Tyr Leu Asp Lys Cys Thr Leu Ala Val Leu Glu Glu Val Gly Pro Asn
          65           70           75           80
Ser Leu Arg Leu Thr Arg Ile Asp Pro Met Asp Asn Tyr Gln Ile Lys
          85           90           95
Asn Ala Tyr Gln Pro Ala Phe His Trp Asp Asn Tyr Ser Glu Leu Val
          100          105          110
Val Ile Pro Pro Val Phe Gly Arg Lys Asp Ala Thr Val Ser Leu Glu
          115          120          125
Ser Asn Gly Phe Asp Val Val Phe Pro Ala Val Val Pro Glu Pro Leu
          130          135          140
Ala Gln Thr Val Leu Gln Lys Leu Leu Leu Tyr Asn Ile Tyr Tyr Arg
          145          150          155          160
Val Ala Glu Thr Thr Pro Thr Asp Val Asn Leu Ala Glu Val Thr Leu
          165          170          175
Tyr Thr Thr Asn Ile Thr Tyr Met Gly Arg Asn Tyr Ala Leu Asp Val
          180          185          190
Asp Pro Val Gly Ser Ser Ser Ala Met Arg Met Leu Asp Asp Leu Ser
          195          200          205
Ile Tyr Leu Cys Val Leu Ser Ala Leu Ile Pro Arg Gly Cys Val Arg
          210          215          220
Leu Leu Thr Ser Leu Val Arg His Asn Lys His Glu Leu Val Glu Ile
          225          230          235          240
Phe Glu Gly Val Val Pro Pro Glu Val Gln Ala Leu Asp Leu Asn Asn
          245          250          255
Val Ser Val Ala Asp Asp Ile Thr Arg Met Gly Ala Leu Ile Thr Tyr
          260          265          270
Leu Arg Ser Leu Ser Ser Ile Phe Asn Leu Gly Arg Arg Phe His Val
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Tyr Ala Phe Ser Ser Asp Thr Asn Thr Ala Ser Cys Trp Cys Ala Tyr
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Asn
305

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<210> 48
<211> 810
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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<220>
<221> CDS
<222> (1) .. (810)

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gtg tgt gaa gtc gcg gtg gac aac gga cga cac aga gcg atg att tat      96
Val Cys Glu Val Ala Val Asp Asn Gly Arg His Arg Ala Met Ile Tyr
          20           25           30

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tac cct aag acc acc aac tta gca aac gag cgc gcg gac gtt gtt aag	144
Tyr Pro Lys Thr Thr Asn Leu Ala Asn Glu Arg Ala Asp Val Val Lys	
35 40 45	
gaa gct ttt gat acc gaa acc cca gtg gac att gta aag caa att gtt	192
Glu Ala Phe Asp Thr Glu Thr Pro Val Asp Ile Val Lys Gln Ile Val	
50 55 60	
aac gag ggc cta gct ata tcc aaa aaa aat tgc gtc cgt ttg gcg ttg	240
Asn Glu Gly Leu Ala Ile Ser Lys Lys Asn Cys Val Arg Leu Ala Leu	
65 70 75 80	
tat tta tat ttt tat ttg cag tac gtg tgc ttt gct ctg ctc ctc act	288
Tyr Leu Tyr Phe Tyr Leu Gln Tyr Val Cys Phe Ala Leu Leu Leu Thr	
85 90 95	
tgg cag tta aac ccg tac atg gac cca ccg ggt ctg gtg ttt gcg gtt	336
Trp Gln Leu Asn Pro Tyr Met Asp Pro Pro Gly Leu Val Phe Ala Val	
100 105 110	
aac ccc atg ggt cca aaa cat gtc acg aaa cta ccg cac ccg gct att	384
Asn Pro Met Gly Pro Lys His Val Thr Lys Leu Pro His Pro Ala Ile	
115 120 125	
gtt gcg gta ggt tgt ggg gca gac gcc atc tgt aag aac tgt agc gtc	432
Val Ala Val Gly Cys Gly Ala Asp Ala Ile Cys Lys Asn Cys Ser Val	
130 135 140	
ccc gat atc aaa acg gag ctt gga atg gtt tac cac aac ggg tct agc	480
Pro Asp Ile Lys Thr Glu Leu Gly Met Val Tyr His Asn Gly Ser Ser	
145 150 155 160	
gat tct ggt cag cgc gca cac tat ggg ctg gcc ctg tta aag gcg gcc	528
Asp Ser Gly Gln Arg Ala His Tyr Gly Leu Ala Leu Leu Lys Ala Ala	
165 170 175	
tgg ctt gtc atg gga aat gtg tgt ccg gaa cca gta gtg cgg caa ggc	576
Trp Leu Val Met Gly Asn Val Cys Pro Glu Pro Val Val Arg Gln Gly	
180 185 190	
gct gca tta ctt ggt cca tgg aac cgg acg gag tgg tcg gat ttt aaa	624
Ala Ala Leu Leu Gly Pro Trp Asn Arg Thr Glu Trp Ser Asp Phe Lys	
195 200 205	
tcg gca atg gcg gca acc acg ttt tgc gga tcc aga ggc gtt ctg tgg	672
Ser Ala Met Ala Ala Thr Thr Phe Cys Gly Ser Arg Gly Val Leu Trp	
210 215 220	
tca ccg att cat gaa aaa aac ctc tgt cgc ccc acc tgg aat gat gta	720
Ser Pro Ile His Glu Lys Asn Leu Cys Arg Pro Thr Trp Asn Asp Val	
225 230 235 240	
att aac aca tca gtt ttt aca aat gaa tca ctc tgt cca aat ata cct	768
Ile Asn Thr Ser Val Phe Thr Asn Glu Ser Leu Cys Pro Asn Ile Pro	
245 250 255	
gtg gtg ccc gaa agt gta ata gtg ctt aat ggt gat gca tga	810
Val Val Pro Glu Ser Val Ile Val Leu Asn Gly Asp Ala	
260 265 270	

<210> 49  
 <211> 269  
 <212> PRT  
 <213> Macaca mulatta rhadinovirus 17577

<400> 49  
 Met Ser Ile Pro Lys Ile Met Thr Val Ser Arg Asp Asn Glu Gly Thr  
 1 5 10 15  
 Val Cys Glu Val Ala Val Asp Asn Gly Arg His Arg Ala Met Ile Tyr  
 20 25 30  
 Tyr Pro Lys Thr Thr Asn Leu Ala Asn Glu Arg Ala Asp Val Val Lys  
 35 40 45  
 Glu Ala Phe Asp Thr Glu Thr Pro Val Asp Ile Val Lys Gln Ile Val  
 50 55 60  
 Asn Glu Gly Leu Ala Ile Ser Lys Lys Asn Cys Val Arg Leu Ala Leu  
 65 70 75 80  
 Tyr Leu Tyr Phe Tyr Leu Gln Tyr Val Cys Phe Ala Leu Leu Leu Thr  
 85 90 95  
 Trp Gln Leu Asn Pro Tyr Met Asp Pro Pro Gly Leu Val Phe Ala Val  
 100 105 110  
 Asn Pro Met Gly Pro Lys His Val Thr Lys Leu Pro His Pro Ala Ile  
 115 120 125  
 Val Ala Val Gly Cys Gly Ala Asp Ala Ile Cys Lys Asn Cys Ser Val  
 130 135 140  
 Pro Asp Ile Lys Thr Glu Leu Gly Met Val Tyr His Asn Gly Ser Ser  
 145 150 155 160  
 Asp Ser Gly Gln Arg Ala His Tyr Gly Leu Ala Leu Leu Lys Ala Ala  
 165 170 175  
 Trp Leu Val Met Gly Asn Val Cys Pro Glu Pro Val Val Arg Gln Gly  
 180 185 190  
 Ala Ala Leu Leu Gly Pro Trp Asn Arg Thr Glu Trp Ser Asp Phe Lys  
 195 200 205  
 Ser Ala Met Ala Ala Thr Thr Phe Cys Gly Ser Arg Gly Val Leu Trp  
 210 215 220  
 Ser Pro Ile His Glu Lys Asn Leu Cys Arg Pro Thr Trp Asn Asp Val  
 225 230 235 240  
 Ile Asn Thr Ser Val Phe Thr Asn Glu Ser Leu Cys Pro Asn Ile Pro  
 245 250 255  
 Val Val Pro Glu Ser Val Ile Val Leu Asn Gly Asp Ala  
 260 265

<210> 50  
 <211> 276  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(276)

<400> 50  
 atg act gca cac acg aat ggg gtt tta acc acg acg ggc ttt tca aca 48  
 Met Thr Ala His Thr Asn Gly Val Leu Thr Thr Thr Gly Phe Ser Thr  
 1 5 10 15  
 agt cag ccg gaa tcg gtt caa gtt tct cca ttt tat cgc gta att aca 96  
 Ser Gln Pro Glu Ser Val Gln Val Ser Pro Phe Tyr Arg Val Ile Thr  
 20 25 30

```

aaa cct ccc gtt atg ggc ttg ttt ttt tgc gtg gct atg tgc gtt atc 144
Lys Pro Pro Val Met Gly Leu Phe Phe Cys Val Ala Met Cys Val Ile
          35                40                45

```

```

gcg ttg gta tgg tac gtg atg cgg agg gtg tgt tgt aag ggg cgc gtt 192
Ala Leu Val Trp Tyr Val Met Arg Arg Val Cys Cys Lys Gly Arg Val
          50                55                60

```

```

gtt gcc gat tcg tgt cgc gac ccg cgt caa ccc gcg tat gag atg ttg 240
Val Ala Asp Ser Cys Arg Asp Pro Arg Gln Pro Ala Tyr Glu Met Leu
          65                70                75                80

```

```

aat gtt agg ttg cgt ccc cac gga acc aat cca tag 276
Asn Val Arg Leu Arg Pro His Gly Thr Asn Pro
          85                90

```

```

<210> 51
<211> 91
<212> PRT
<213> Macaca mulatta rhadinovirus 17577

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<400> 51
Met Thr Ala His Thr Asn Gly Val Leu Thr Thr Thr Gly Phe Ser Thr
  1          5          10          15
Ser Gln Pro Glu Ser Val Gln Val Ser Pro Phe Tyr Arg Val Ile Thr
          20          25          30
Lys Pro Pro Val Met Gly Leu Phe Phe Cys Val Ala Met Cys Val Ile
          35          40          45
Ala Leu Val Trp Tyr Val Met Arg Arg Val Cys Cys Lys Gly Arg Val
          50          55          60
Val Ala Asp Ser Cys Arg Asp Pro Arg Gln Pro Ala Tyr Glu Met Leu
          65          70          75          80
Asn Val Arg Leu Arg Pro His Gly Thr Asn Pro
          85          90

```

```

<210> 52
<211> 1047
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

```

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<220>
<221> CDS
<222> (1)..(1047)

```

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<400> 52
atg ctt caa aag gac gca aaa ctg att ttt ata tcc tca agt aac tca 48
Met Leu Gln Lys Asp Ala Lys Leu Ile Phe Ile Ser Ser Ser Asn Ser
  1          5          10          15

```

```

tct gac aaa tca act agt ttt tta ctt aat ttg aag gac gcc cac gaa 96
Ser Asp Lys Ser Thr Ser Phe Leu Leu Asn Leu Lys Asp Ala His Glu
          20          25          30

```

```

aag atg ctt aac gtg gtg aac tac gta tgt ccg gat cat aaa gat gat 144
Lys Met Leu Asn Val Val Asn Tyr Val Cys Pro Asp His Lys Asp Asp
          35          40          45

```

```

ttt aac ttg caa gac act gtc gtg gcg tgc ccg tgc tac cgc ctg cat 192

```

Phe	Asn	Leu	Gln	Asp	Thr	Val	Val	Ala	Cys	Pro	Cys	Tyr	Arg	Leu	His		
50						55					60						
att	cct	gcc	tat	att	acg	att	gat	gag	acg	gta	cgg	agc	acg	act	aat	240	
Ile	Pro	Ala	Tyr	Ile	Thr	Ile	Asp	Glu	Thr	Val	Arg	Ser	Thr	Thr	Asn	80	
65					70				75								
ctt	ttt	ttg	gaa	ggc	gca	ttc	tcc	acg	gag	cta	atg	ggg	gac	gct	gcc	288	
Leu	Phe	Leu	Glu	Gly	Ala	Phe	Ser	Thr	Glu	Leu	Met	Gly	Asp	Ala	Ala	95	
				85					90								
acg	tcc	gct	caa	agc	atg	cat	aaa	atc	gtt	agc	gac	tct	tcg	ctg	tca	336	
Thr	Ser	Ala	Gln	Ser	Met	His	Lys	Ile	Val	Ser	Asp	Ser	Ser	Leu	Ser	110	
			100					105									
caa	ttg	gat	ctg	tgc	cgc	gta	aag	agc	acg	tca	caa	gat	ata	cag	ggc	384	
Gln	Leu	Asp	Leu	Cys	Arg	Val	Lys	Ser	Thr	Ser	Gln	Asp	Ile	Gln	Gly	125	
			115				120										
gcg	atg	aag	ccg	tgt	ctc	cac	gtt	tac	ata	gac	ccg	gcg	tac	acc	aac	432	
Ala	Met	Lys	Pro	Cys	Leu	His	Val	Tyr	Ile	Asp	Pro	Ala	Tyr	Thr	Asn	140	
	130					135											
aac	aca	gac	gcg	tcc	ggc	acc	ggc	atc	ggt	gcg	gtg	att	gcg	gta	aat	480	
Asn	Thr	Asp	Ala	Ser	Gly	Thr	Gly	Ile	Gly	Ala	Val	Ile	Ala	Val	Asn	160	
	145				150				155								
cac	aag	gtg	att	aaa	tgc	att	tta	tta	ggc	gtg	gaa	cat	ttt	ttt	cta	528	
His	Lys	Val	Ile	Lys	Cys	Ile	Leu	Leu	Gly	Val	Glu	His	Phe	Phe	Leu	175	
				165					170								
aga	gat	cta	acc	ggc	acc	gcc	gcg	tac	cag	ata	gcg	tca	tgt	gcc	gcc	576	
Arg	Asp	Leu	Thr	Gly	Thr	Ala	Ala	Tyr	Gln	Ile	Ala	Ser	Cys	Ala	Ala	190	
			180					185									
gcg	tta	att	cga	gcg	atc	gtt	acc	ctt	cac	ccg	cag	atc	acg	cac	gtt	624	
Ala	Leu	Ile	Arg	Ala	Ile	Val	Thr	Leu	His	Pro	Gln	Ile	Thr	His	Val	205	
		195					200										
aac	gtc	gcc	gtg	gaa	ggc	aac	agc	agt	caa	gat	gcc	gga	gtg	gcc	ata	672	
Asn	Val	Ala	Val	Glu	Gly	Asn	Ser	Ser	Gln	Asp	Ala	Gly	Val	Ala	Ile	220	
	210					215											
gca	acc	gtg	tta	aac	gag	att	tgc	tcg	gtc	cct	ctt	agt	ttt	tta	cac	720	
Ala	Thr	Val	Leu	Asn	Glu	Ile	Cys	Ser	Val	Pro	Leu	Ser	Phe	Leu	His	240	
	225				230				235								
cac	gtg	gac	aag	aac	act	ctt	ata	cgt	tcg	ccc	att	tac	atg	ttg	ggg	768	
His	Val	Asp	Lys	Asn	Thr	Leu	Ile	Arg	Ser	Pro	Ile	Tyr	Met	Leu	Gly	255	
				245					250								
cca	gag	aaa	gcc	aag	gcg	ttt	gaa	tct	ttt	att	tac	gca	ttg	aac	tcg	816	
Pro	Glu	Lys	Ala	Lys	Ala	Phe	Glu	Ser	Phe	Ile	Tyr	Ala	Leu	Asn	Ser	270	
			260					265									
gga	acg	ttt	agc	gct	agc	caa	act	gtg	gtg	tct	cac	act	att	aag	cta	864	
Gly	Thr	Phe	Ser	Ala	Ser	Gln	Thr	Val	Val	Ser	His	Thr	Ile	Lys	Leu	285	
		275					280										
tcg	ttt	gat	ccc	gta	gcg	tat	cta	ata	gat	caa	atc	aag	gca	ata	cgt	912	
Ser	Phe	Asp	Pro	Val	Ala	Tyr	Leu	Ile	Asp	Gln	Ile	Lys	Ala	Ile	Arg		

290 295 300

tgc att cca cta aaa gac gga ggt cac acg tac tgc gcg aaa caa aaa 960  
 Cys Ile Pro Leu Lys Asp Gly Gly His Thr Tyr Cys Ala Lys Gln Lys  
 305 310 315 320

acc atg tcg gac gac gtg ctt gtc gcc gcc gtc atg gcc cac tac atg 1008  
 Thr Met Ser Asp Asp Val Leu Val Ala Ala Val Met Ala His Tyr Met  
 325 330 335

gca acc aac gat aaa ttt gtt ttt aaa tcg cta gaa taa 1047  
 Ala Thr Asn Asp Lys Phe Val Phe Lys Ser Leu Glu  
 340 345

<210> 53  
 <211> 348  
 <212> PRT  
 <213> Macaca mulatta rhadinovirus 17577

<400> 53  
 Met Leu Gln Lys Asp Ala Lys Leu Ile Phe Ile Ser Ser Ser Asn Ser  
 1 5 10 15  
 Ser Asp Lys Ser Thr Ser Phe Leu Leu Asn Leu Lys Asp Ala His Glu  
 20 25 30  
 Lys Met Leu Asn Val Val Asn Tyr Val Cys Pro Asp His Lys Asp Asp  
 35 40 45  
 Phe Asn Leu Gln Asp Thr Val Val Ala Cys Pro Cys Tyr Arg Leu His  
 50 55 60  
 Ile Pro Ala Tyr Ile Thr Ile Asp Glu Thr Val Arg Ser Thr Thr Asn  
 65 70 75 80  
 Leu Phe Leu Glu Gly Ala Phe Ser Thr Glu Leu Met Gly Asp Ala Ala  
 85 90 95  
 Thr Ser Ala Gln Ser Met His Lys Ile Val Ser Asp Ser Ser Leu Ser  
 100 105 110  
 Gln Leu Asp Leu Cys Arg Val Lys Ser Thr Ser Gln Asp Ile Gln Gly  
 115 120 125  
 Ala Met Lys Pro Cys Leu His Val Tyr Ile Asp Pro Ala Tyr Thr Asn  
 130 135 140  
 Asn Thr Asp Ala Ser Gly Thr Gly Ile Gly Ala Val Ile Ala Val Asn  
 145 150 155 160  
 His Lys Val Ile Lys Cys Ile Leu Leu Gly Val Glu His Phe Phe Leu  
 165 170 175  
 Arg Asp Leu Thr Gly Thr Ala Ala Tyr Gln Ile Ala Ser Cys Ala Ala  
 180 185 190  
 Ala Leu Ile Arg Ala Ile Val Thr Leu His Pro Gln Ile Thr His Val  
 195 200 205  
 Asn Val Ala Val Glu Gly Asn Ser Ser Gln Asp Ala Gly Val Ala Ile  
 210 215 220  
 Ala Thr Val Leu Asn Glu Ile Cys Ser Val Pro Leu Ser Phe Leu His  
 225 230 235 240  
 His Val Asp Lys Asn Thr Leu Ile Arg Ser Pro Ile Tyr Met Leu Gly  
 245 250 255  
 Pro Glu Lys Ala Lys Ala Phe Glu Ser Phe Ile Tyr Ala Leu Asn Ser  
 260 265 270  
 Gly Thr Phe Ser Ala Ser Gln Thr Val Val Ser His Thr Ile Lys Leu  
 275 280 285  
 Ser Phe Asp Pro Val Ala Tyr Leu Ile Asp Gln Ile Lys Ala Ile Arg  
 290 295 300  
 Cys Ile Pro Leu Lys Asp Gly Gly His Thr Tyr Cys Ala Lys Gln Lys  
 305 310 315 320





&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1) .. (654)

&lt;400&gt; 56

atg tct ctc tta tac cac gat cgc tgc aaa gaa tgt caa atg acg cgc	48
Met Ser Leu Leu Tyr His Asp Arg Cys Lys Glu Cys Gln Met Thr Arg	
1 5 10 15	
gtc aac agc cca ata tgt cga ttt cat aac gtc tct aac tta tac cag	96
Val Asn Ser Pro Ile Cys Arg Phe His Asn Val Ser Asn Leu Tyr Gln	
20 25 30	
tgt ttg gat tgt aag cgc tat cac gta tgc gac ggg gga cgc aac tgc	144
Cys Leu Asp Cys Lys Arg Tyr His Val Cys Asp Gly Gly Arg Asn Cys	
35 40 45	
gtg atc gtg tac act cgc gaa aat cta gtg tgt gat tta acg gga aac	192
Val Ile Val Tyr Thr Arg Glu Asn Leu Val Cys Asp Leu Thr Gly Asn	
50 55 60	
tgc gtt ttg gat aat gtg cag gac gta tgt tcg tac ggt cct cca gaa	240
Cys Val Leu Asp Asn Val Gln Asp Val Cys Ser Tyr Gly Pro Pro Glu	
65 70 75 80	
cgc cgc gta ccc gac gcc ttc atc gat ccg ctc gtg tca cac ggc acg	288
Arg Arg Val Pro Asp Ala Phe Ile Asp Pro Leu Val Ser His Gly Thr	
85 90 95	
agg gaa tgt ctt aaa agc gat ata ctg agg tac ttt gag acg gtc ggt	336
Arg Glu Cys Leu Lys Ser Asp Ile Leu Arg Tyr Phe Glu Thr Val Gly	
100 105 110	
gtg aaa tct gag gca tat tct acc gtt gtc aag aat gga caa ttg aat	384
Val Lys Ser Glu Ala Tyr Ser Thr Val Val Lys Asn Gly Gln Leu Asn	
115 120 125	
ggc atc ata ggt aga tta ata gac gct acg ttt aac gag tgc ctt ccg	432
Gly Ile Ile Gly Arg Leu Ile Asp Ala Thr Phe Asn Glu Cys Leu Pro	
130 135 140	
gta atg agc gac ggc gaa ggt ggc aga gac ctc gcg gcg agc att tac	480
Val Met Ser Asp Gly Glu Gly Gly Arg Asp Leu Ala Ala Ser Ile Tyr	
145 150 155 160	
atc cac ata att atc tcc ata tac tcc act aaa acg gta tat gat aat	528
Ile His Ile Ile Ile Ser Ile Tyr Ser Thr Lys Thr Val Tyr Asp Asn	
165 170 175	
ctt cta ttt aaa tgt acg aga aat aaa aaa tac gac cac att gta aaa	576
Leu Leu Phe Lys Cys Thr Arg Asn Lys Lys Tyr Asp His Ile Val Lys	
180 185 190	
act atc aga gcg caa tgg atg cgc atg gtc tca acc ggc gat ccg tcg	624
Thr Ile Arg Ala Gln Trp Met Arg Met Val Ser Thr Gly Asp Pro Ser	
195 200 205	
cgg gtc agt gcg acg ggt tgt ttc acg tga	654
Arg Val Ser Ala Thr Gly Cys Phe Thr	
210 215	

<210> 57  
 <211> 217  
 <212> PRT  
 <213> Macaca mulatta rhadinovirus 17577

<400> 57  
 Met Ser Leu Leu Tyr His Asp Arg Cys Lys Glu Cys Gln Met Thr Arg  
     1                    5                    10                    15  
 Val Asn Ser Pro Ile Cys Arg Phe His Asn Val Ser Asn Leu Tyr Gln  
                     20                    25                    30  
 Cys Leu Asp Cys Lys Arg Tyr His Val Cys Asp Gly Gly Arg Asn Cys  
                     35                    40                    45  
 Val Ile Val Tyr Thr Arg Glu Asn Leu Val Cys Asp Leu Thr Gly Asn  
                     50                    55                    60  
 Cys Val Leu Asp Asn Val Gln Asp Val Cys Ser Tyr Gly Pro Pro Glu  
                     65                    70                    75                    80  
 Arg Arg Val Pro Asp Ala Phe Ile Asp Pro Leu Val Ser His Gly Thr  
                     85                    90                    95  
 Arg Glu Cys Leu Lys Ser Asp Ile Leu Arg Tyr Phe Glu Thr Val Gly  
                     100                    105                    110  
 Val Lys Ser Glu Ala Tyr Ser Thr Val Val Lys Asn Gly Gln Leu Asn  
                     115                    120                    125  
 Gly Ile Ile Gly Arg Leu Ile Asp Ala Thr Phe Asn Glu Cys Leu Pro  
                     130                    135                    140  
 Val Met Ser Asp Gly Glu Gly Gly Arg Asp Leu Ala Ala Ser Ile Tyr  
                     145                    150                    155                    160  
 Ile His Ile Ile Ile Ser Ile Tyr Ser Thr Lys Thr Val Tyr Asp Asn  
                     165                    170                    175  
 Leu Leu Phe Lys Cys Thr Arg Asn Lys Lys Tyr Asp His Ile Val Lys  
                     180                    185                    190  
 Thr Ile Arg Ala Gln Trp Met Arg Met Val Ser Thr Gly Asp Pro Ser  
                     195                    200                    205  
 Arg Val Ser Ala Thr Gly Cys Phe Thr  
                     210                    215

<210> 58  
 <211> 1395  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(1395)

<400> 58  
 atg gat gcg cat ggt ctc aac cgg cga tcc gtc gcg ggt cag tgc gac 48  
 Met Asp Ala His Gly Leu Asn Arg Arg Ser Val Ala Gly Gln Cys Asp  
     1                    5                    10                    15  
 ggg ttg ttt cac gtg ata ctt ccg cga ggg ttt atc ctc gcg aac aat 96  
 Gly Leu Phe His Val Ile Leu Pro Arg Gly Phe Ile Leu Ala Asn Asn  
                     20                    25                    30  
 att acg tgc ggt gaa cgg cag cgg ttt ttt gca cac act tgg ttc gct 144  
 Ile Thr Cys Gly Glu Arg Gln Arg Phe Phe Ala His Thr Trp Phe Ala  
                     35                    40                    45

gca tct gga cgc acg tct aag act tta tac gtg tgg gga cgg gta ttt	192
Ala Ser Gly Arg Thr Ser Lys Thr Leu Tyr Val Trp Gly Arg Val Phe	
50 55 60	
caa aac acc gac ccg ggc cgc ggg gac ggt ccg tcc ggg ccg tgg tcc	240
Gln Asn Thr Asp Pro Gly Arg Gly Asp Gly Pro Ser Gly Pro Trp Ser	
65 70 75 80	
gga ctg gcg att agt ctg cct ctg ttt acc aca aat gga aaa ttt cat	288
Gly Leu Ala Ile Ser Leu Pro Leu Phe Thr Thr Asn Gly Lys Phe His	
85 90 95	
ccg ttt gat gta gtt ata ctc aag gcc gat acg cct gac tct gga agc	336
Pro Phe Asp Val Val Ile Leu Lys Ala Asp Thr Pro Asp Ser Gly Ser	
100 105 110	
tcg tgg acc gtg aag ttc ttg tat atg tca tta att gcg gct tac aga	384
Ser Trp Thr Val Lys Phe Leu Tyr Met Ser Leu Ile Ala Ala Tyr Arg	
115 120 125	
aac gca atg cga ggt tta aaa gat aaa gtt tcg caa tgt acc gat gcc	432
Asn Ala Met Arg Gly Leu Lys Asp Lys Val Ser Gln Cys Thr Asp Ala	
130 135 140	
gcc gtt gac ggt gag gtt cat cct cta acc gtc tta aaa gaa gcg ttg	480
Ala Val Asp Gly Glu Val His Pro Leu Thr Val Leu Lys Glu Ala Leu	
145 150 155 160	
gta tca ccg gac act gct acg cga ccc gtg tcc gcg tgc aac cct cta	528
Val Ser Pro Asp Thr Ala Thr Arg Pro Val Ser Ala Cys Asn Pro Leu	
165 170 175	
cag atg ttg acc gga ctc tta cag tct agg gta ccg gac gac tac gtg	576
Gln Met Leu Thr Gly Leu Leu Gln Ser Arg Val Arg Asp Asp Tyr Val	
180 185 190	
aca cac cac cgt gcg ctc gaa cgc cca ggt aat gtg agg gga caa gta	624
Thr His His Arg Ala Leu Glu Arg Pro Gly Asn Val Arg Gly Gln Val	
195 200 205	
atc gcc ccg acg cgc acc gag atg cca aac gga tcg cca agt cgt gta	672
Ile Ala Pro Thr Arg Thr Glu Met Pro Asn Gly Ser Pro Ser Arg Val	
210 215 220	
agg ctt gga ttc cgc cct ccc aaa caa gcc aac tat cca aag acg tgg	720
Arg Leu Gly Phe Arg Pro Pro Lys Gln Ala Asn Tyr Pro Lys Thr Trp	
225 230 235 240	
gcg cag gcg cgt cac gtt ttc tcg tct cgc gca tat tac gtg tgc gta	768
Ala Gln Ala Arg His Val Phe Ser Ser Arg Ala Tyr Tyr Val Cys Val	
245 250 255	
tat gat aac gaa gaa cta gat acc aag tgg cag ccg caa gat ccg cgg	816
Tyr Asp Asn Glu Glu Leu Asp Thr Lys Trp Gln Arg Gln Asp Pro Arg	
260 265 270	
ccg ttg ccg cta gat tgg tcc gat ccg gtc gcg tac ctg tta gag ggc	864
Pro Leu Pro Leu Asp Trp Ser Asp Pro Val Ala Tyr Leu Leu Glu Gly	
275 280 285	
gat ttg ttt tta gga gcc aag cag aat gcg ttt gtc gat tct ata gaa	912

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Asp Leu Phe Leu Gly Ala Lys Gln Asn Ala Phe Val Asp Ser Ile Glu
290                295                300

aag acg tgc agg tgt cag aac tat acc att aag caa ttt ttt ccg gtt 960
Lys Thr Cys Arg Cys Gln Asn Tyr Thr Ile Lys Gln Phe Phe Pro Val
305                310                315                320

ttg ata aat agg gac aac gaa aca gtc gac tta att aag gag cat ttt 1008
Leu Ile Asn Arg Asp Asn Glu Thr Val Asp Leu Ile Lys Glu His Phe
325                330                335

ata gag gcg tgc ttc gtg att aga aac cag gtg tca gag agg agc gct 1056
Ile Glu Ala Cys Phe Val Ile Arg Asn Gln Val Ser Glu Arg Ser Ala
340                345                350

tgg gta aag gcg gcg ctg ttt cgc aac gat agt aac acg tat tgg aag 1104
Trp Val Lys Ala Ala Leu Phe Arg Asn Asp Ser Asn Thr Tyr Trp Lys
355                360                365

gat gtt ttg gga tta tgg gag cat ggg cct cat aag ctg ggt acg gct 1152
Asp Val Leu Gly Leu Trp Glu His Gly Pro His Lys Leu Gly Thr Ala
370                375                380

ata aaa cta cca aca tcg gaa cct tgc aat gcc gac gta aac tgg agc 1200
Ile Lys Leu Pro Thr Ser Glu Pro Cys Asn Ala Asp Val Asn Trp Ser
385                390                395                400

tgg ctc ctg tgt gac gag gat ata act cgg tca att agc ggg cag tct 1248
Trp Leu Leu Cys Asp Glu Asp Ile Thr Arg Ser Ile Ser Gly Gln Ser
405                410                415

act gtt tgc tta gtt gtc tcg cct acc ctg acc gcc tgg ctg gtg ctc 1296
Thr Val Cys Leu Val Val Ser Pro Thr Leu Thr Ala Trp Leu Val Leu
420                425                430

ccg ggg ggc ttt gtt att aaa ggc cgc tac gac cta tca agc gag gat 1344
Pro Gly Gly Phe Val Ile Lys Gly Arg Tyr Asp Leu Ser Ser Glu Asp
435                440                445

tta atg ttt gtg gct tcg aga tat ggc cac cca gcg tcg tca cat tct 1392
Leu Met Phe Val Ala Ser Arg Tyr Gly His Pro Ala Ser Ser His Ser
450                455                460

taa 1395
465

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<210> 59
<211> 464
<212> PRT
<213> Macaca mulatta rhadinovirus 17577

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<400> 59
Met Asp Ala His Gly Leu Asn Arg Arg Ser Val Ala Gly Gln Cys Asp
1          5          10          15
Gly Leu Phe His Val Ile Leu Pro Arg Gly Phe Ile Leu Ala Asn Asn
20          25          30
Ile Thr Cys Gly Glu Arg Gln Arg Phe Phe Ala His Thr Trp Phe Ala
35          40          45
Ala Ser Gly Arg Thr Ser Lys Thr Leu Tyr Val Trp Gly Arg Val Phe

```

	50					55					60					
Gln 65	Asn	Thr	Asp	Pro	Gly 70	Arg	Gly	Asp	Gly	Pro 75	Ser	Gly	Pro	Trp	Ser 80	
Gly	Leu	Ala	Ile	Ser 85	Leu	Pro	Leu	Phe	Thr 90	Thr	Asn	Gly	Lys	Phe	His 95	
Pro	Phe	Asp	Val	Val 100	Ile	Leu	Lys	Ala	Asp 105	Thr	Pro	Asp	Ser	Gly	Ser 110	
Ser	Trp	Thr	Val	Lys 115	Phe	Leu	Tyr	Met	Ser 120	Ser	Leu	Ile	Ala	Tyr	Arg 125	
Asn	Ala	Met	Arg	Gly 130	Leu	Lys	Asp	Lys	Val 135	Ser	Gln	Cys	Thr	Asp	Ala 140	
Ala 145	Val	Asp	Gly	Glu	Val 150	His	Pro	Leu	Thr 155	Val	Leu	Lys	Glu	Ala	Leu 160	
Val	Ser	Pro	Asp	Thr 165	Ala	Thr	Arg	Pro	Val 170	Ser	Ala	Cys	Asn	Pro	Leu 175	
Gln	Met	Leu	Thr	Gly 180	Leu	Leu	Gln	Ser	Arg 185	Val	Arg	Asp	Asp	Tyr	Val 190	
Thr	His	His	Arg	Ala 195	Leu	Glu	Arg	Pro	Gly 200	Asn	Val	Arg	Gly	Gln	Val 205	
Ile	Ala	Pro	Thr	Arg 210	Thr	Glu	Met	Pro	Asn 215	Gly	Ser	Pro	Ser	Arg	Val 220	
Arg 225	Leu	Gly	Phe	Arg 230	Pro	Pro	Lys	Gln	Ala 235	Asn	Tyr	Pro	Lys	Thr	Trp 240	
Ala	Gln	Ala	Arg	His 245	Val	Phe	Ser	Ser	Arg 250	Ala	Tyr	Tyr	Val	Cys	Val 255	
Tyr	Asp	Asn	Glu	Glu 260	Leu	Asp	Thr	Lys	Trp 265	Gln	Arg	Gln	Asp	Pro	Arg 270	
Pro	Leu	Pro	Leu	Asp 275	Trp	Ser	Asp	Pro	Val 280	Ala	Tyr	Leu	Leu	Glu	Gly 285	
Asp	Leu	Phe	Leu	Gly 290	Ala	Lys	Gln	Asn	Ala 295	Phe	Val	Asp	Ser	Ile	Glu 300	
Lys 305	Thr	Cys	Arg	Cys 310	Gln	Asn	Tyr	Thr	Ile 315	Lys	Gln	Phe	Phe	Pro	Val 320	
Leu	Ile	Asn	Arg	Asp 325	Asn	Glu	Thr	Val	Asp 330	Leu	Ile	Lys	Glu	His	Phe 335	
Ile	Glu	Ala	Cys	Phe 340	Val	Ile	Arg	Asn	Gln 345	Val	Ser	Glu	Arg	Ser	Ala 350	
Trp	Val	Lys	Ala	Ala 355	Leu	Phe	Arg	Asn	Asp 360	Ser	Asn	Thr	Tyr	Trp	Lys 365	
Asp	Val	Leu	Gly	Leu 370	Trp	Glu	His	Gly	Pro 375	His	Lys	Leu	Gly	Thr	Ala 380	
Ile 385	Lys	Leu	Pro	Thr 390	Ser	Glu	Pro	Cys	Asn 395	Ala	Asp	Val	Asn	Trp	Ser 400	
Trp	Leu	Leu	Cys	Asp 405	Glu	Asp	Ile	Thr	Arg 410	Ser	Ile	Ser	Gly	Gln	Ser 415	
Thr	Val	Cys	Leu	Val 420	Val	Ser	Pro	Thr	Leu 425	Thr	Ala	Trp	Leu	Val	Leu 430	
Pro	Gly	Gly	Phe	Val 435	Ile	Lys	Gly	Arg	Tyr 440	Asp	Leu	Ser	Ser	Glu	Asp 445	
Leu	Met	Phe	Val	Ala 450	Ser	Arg	Tyr	Gly	His 455	Pro	Ala	Ser	Ser	His	Ser 460	

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<210> 60
<211> 1011
<212> DNA
<213> Macaca mulatta rhadinovirus 17577
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<220>  
<221> CDS

&lt;222&gt; (1) .. (1011)

&lt;400&gt; 60

atg gcc acc cag cgt cgt cac att ctt aaa tcg ttt tta aac aag gaa	48
Met Ala Thr Gln Arg Arg His Ile Leu Lys Ser Phe Leu Asn Lys Glu	
1 5 10 15	
tgc ata tgg ttg cga cac ccg ggt acg tcc gcg ttt gtt cgg gta tac	96
Cys Ile Trp Leu Arg His Pro Gly Thr Ser Ala Phe Val Arg Val Tyr	
20 25 30	
acc gcg acc act gcg cat tct gcc gtt ttt gac ccg ccg gta act agc	144
Thr Ala Thr Thr Ala His Ser Ala Val Phe Asp Pro Pro Val Thr Ser	
35 40 45	
gaa aat gcg atg tca ctt aac ttt tta aat gtt atg atc gta atc atg	192
Glu Asn Ala Met Ser Leu Asn Phe Leu Asn Val Met Ile Val Ile Met	
50 55 60	
aaa cca aaa gaa ttt ggc ccg tgc gtt acc gtg tac atg aat gga gat	240
Lys Pro Lys Glu Phe Gly Pro Cys Val Thr Val Tyr Met Asn Gly Asp	
65 70 75 80	
att cta gat ttt tgt gcc acg gaa tct gtc gcc ata agg gac gtg cct	288
Ile Leu Asp Phe Cys Ala Thr Glu Ser Val Ala Ile Arg Asp Val Pro	
85 90 95	
ggg agg gcg gac ctg tgt tta att cgt ttt ggt acc ctt tct aat gcg	336
Gly Arg Ala Asp Leu Cys Leu Ile Arg Phe Gly Thr Leu Ser Asn Ala	
100 105 110	
ccg agg agc gtt ccg ata ccc ggg ccg ttg aac cca cat ccg cga gaa	384
Pro Arg Ser Val Pro Ile Pro Gly Pro Leu Asn Pro His Pro Arg Glu	
115 120 125	
acc gtg ccc ggg cta aca aaa cag gaa att ata tac act tcg caa aca	432
Thr Val Pro Gly Leu Thr Lys Gln Glu Ile Ile Tyr Thr Ser Gln Thr	
130 135 140	
gtg cca aga gga cag ata cca gat gcc ata aag ggg aaa gag ttc cac	480
Val Pro Arg Gly Gln Ile Pro Asp Ala Ile Lys Gly Lys Glu Phe His	
145 150 155 160	
caa ata aat ccg ttt ttg tgg ttt gac gga ggg gcg ttt tgg caa ctg	528
Gln Ile Asn Pro Phe Leu Trp Phe Asp Gly Gly Ala Phe Trp Gln Leu	
165 170 175	
ttc ctc tct gtg gat ttt atg ctg ctc tgt ccc gca ctc gac aca gtt	576
Phe Leu Ser Val Asp Phe Met Leu Leu Cys Pro Ala Leu Asp Thr Val	
180 185 190	
ccg tcc ctg gcc aga atc gtt ggg ctt ctt aca cag tgc gat aag agc	624
Pro Ser Leu Ala Arg Ile Val Gly Leu Leu Thr Gln Cys Asp Lys Ser	
195 200 205	
acg tgt aaa att tgt acg ggg gcc cac gta cac gtt aac ccg tat cgc	672
Thr Cys Lys Ile Cys Thr Gly Ala His Val His Val Asn Pro Tyr Arg	
210 215 220	
gga tac acg cca cct gac tcg caa ggg acc tca ccc tcg tgc ccc tgc	720
Gly Tyr Thr Pro Pro Asp Ser Gln Gly Thr Ser Pro Ser Cys Pro Cys	

225	230	235	240	
ctt atc tgc tgc ggg gcc agg cgc gcg gcg gat gtc ctg gtt acc gga				768
Leu Ile Ser Cys Gly Ala Arg Arg Ala Ala Asp Val Leu Val Thr Gly				
	245	250	255	
cac gtt aat ctt ttg ggc ctg ctc ttt gac ccc aaa gcc tcc ccc aaa				816
His Val Asn Leu Leu Gly Leu Leu Phe Asp Pro Lys Ala Ser Pro Lys				
	260	265	270	
gtg acc aag ctg cgt tta aaa aga aac cca cgc ccg gta ccg ata gag				864
Val Thr Lys Leu Arg Leu Lys Arg Asn Pro Arg Pro Val Pro Ile Glu				
	275	280	285	
gac gcc atg tgc ggc gtc acg gcc gaa ggg acc gag gtg caa ccc act				912
Asp Ala Met Ser Gly Val Thr Ala Glu Gly Thr Glu Val Gln Pro Thr				
	290	295	300	
tcg cta ccg tgg gcc ctc att cgc ctg ccg gat tta gcc agt cgc gtg				960
Ser Leu Pro Trp Ala Leu Ile Arg Leu Pro Asp Leu Ala Ser Arg Val				
	305	310	315	320
atg cta tac ggc tgc cag aac tta aaa agc atc tgc tta cgt tct tat				1008
Met Leu Tyr Gly Cys Gln Asn Leu Lys Ser Ile Cys Leu Arg Ser Tyr				
	325	330	335	
tga				1011

<210> 61  
 <211> 336  
 <212> PRT  
 <213> Macaca mulatta rhadinovirus 17577

<400> 61  
 Met Ala Thr Gln Arg Arg His Ile Leu Lys Ser Phe Leu Asn Lys Glu  
 1 5 10 15  
 Cys Ile Trp Leu Arg His Pro Gly Thr Ser Ala Phe Val Arg Val Tyr  
 20 25 30  
 Thr Ala Thr Thr Ala His Ser Ala Val Phe Asp Pro Pro Val Thr Ser  
 35 40 45  
 Glu Asn Ala Met Ser Leu Asn Phe Leu Asn Val Met Ile Val Ile Met  
 50 55 60  
 Lys Pro Lys Glu Phe Gly Pro Cys Val Thr Val Tyr Met Asn Gly Asp  
 65 70 75 80  
 Ile Leu Asp Phe Cys Ala Thr Glu Ser Val Ala Ile Arg Asp Val Pro  
 85 90 95  
 Gly Arg Ala Asp Leu Cys Leu Ile Arg Phe Gly Thr Leu Ser Asn Ala  
 100 105 110  
 Pro Arg Ser Val Pro Ile Pro Gly Pro Leu Asn Pro His Pro Arg Glu  
 115 120 125  
 Thr Val Pro Gly Leu Thr Lys Gln Glu Ile Ile Tyr Thr Ser Gln Thr  
 130 135 140  
 Val Pro Arg Gly Gln Ile Pro Asp Ala Ile Lys Gly Lys Glu Phe His  
 145 150 155 160  
 Gln Ile Asn Pro Phe Leu Trp Phe Asp Gly Gly Ala Phe Trp Gln Leu  
 165 170 175  
 Phe Leu Ser Val Asp Phe Met Leu Leu Cys Pro Ala Leu Asp Thr Val  
 180 185 190  
 Pro Ser Leu Ala Arg Ile Val Gly Leu Leu Thr Gln Cys Asp Lys Ser



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      195              200              205
Thr Cys Lys Ile Cys Thr Gly Ala His Val His Val Asn Pro Tyr Arg
  210              215              220
Gly Tyr Thr Pro Pro Asp Ser Gln Gly Thr Ser Pro Ser Cys Pro Cys
  225              230              235              240
Leu Ile Ser Cys Gly Ala Arg Arg Ala Ala Asp Val Leu Val Thr Gly
      245              250              255
His Val Asn Leu Leu Gly Leu Leu Phe Asp Pro Lys Ala Ser Pro Lys
      260              265              270
Val Thr Lys Leu Arg Leu Lys Arg Asn Pro Arg Pro Val Pro Ile Glu
      275              280              285
Asp Ala Met Ser Gly Val Thr Ala Glu Gly Thr Glu Val Gln Pro Thr
      290              295              300
Ser Leu Pro Trp Ala Leu Ile Arg Leu Pro Asp Leu Ala Ser Arg Val
  305              310              315              320
Met Leu Tyr Gly Cys Gln Asn Leu Lys Ser Ile Cys Leu Arg Ser Tyr
      325              330              335

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<210> 62  
 <211> 984  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(984)

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<400> 62
atg ttg tta acc agc tat cgc gaa cgt ctt caa aat aac ttg cgc gtg      48
Met Leu Leu Thr Ser Tyr Arg Glu Arg Leu Gln Asn Asn Leu Arg Val
  1              5              10              15

gtc acg gac ggt ggt tgc gaa aac tgg ttt cgg caa ccg ccc gtt att      96
Val Thr Asp Gly Gly Cys Glu Asn Trp Phe Arg Gln Pro Pro Val Ile
      20              25              30

ata tcg ggc aac gac aag acc gaa cga atg gcc cac cca tgc ttg gga      144
Ile Ser Gly Asn Asp Lys Thr Glu Arg Met Ala His Pro Cys Leu Gly
      35              40              45

gtt att cac gcg gtt aat gca tat agt tct gtt tta gac gat tat ctt      192
Val Ile His Ala Val Asn Ala Tyr Ser Ser Val Leu Asp Asp Tyr Leu
      50              55              60

caa acg tac cgc aga gtt caa gaa ccc atg ccg gcc cct acg ttg gga      240
Gln Thr Tyr Arg Arg Val Gln Glu Pro Met Pro Ala Pro Thr Leu Gly
      65              70              75              80

aag ccc cga att tct agc cac gct acg ttg ccc cgg tta acc gag gaa      288
Lys Pro Arg Ile Ser Ser His Ala Thr Leu Pro Arg Leu Thr Glu Glu
      85              90              95

ctc aca aac tac ctt aaa caa aca tgt tgt cgg gtc caa atg gca aac      336
Leu Thr Asn Tyr Leu Lys Gln Thr Cys Cys Arg Val Gln Met Ala Asn
      100              105              110

gcc aag gac cag tac atg gaa tac caa tcg gcc caa cgg acc cac gaa      384
Ala Lys Asp Gln Tyr Met Glu Tyr Gln Ser Ala Gln Arg Thr His Glu
      115              120              125

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gct ttc cta gag tgc ccc gtt tat gca gaa ctg cgg cag ttt tta gcc 432
Ala Phe Leu Glu Cys Pro Val Tyr Ala Glu Leu Arg Gln Phe Leu Ala
    130                      135                      140

aac ctg tcg tca ttt tta aat ggg agt tac gtg ccc ggg gtt tgt tgc 480
Asn Leu Ser Ser Phe Leu Asn Gly Ser Tyr Val Pro Gly Val Cys Cys
    145                      150                      155                      160

ctt gag ccc ttt caa caa caa tta atc atg cac acg ttt tat ttt atc 528
Leu Glu Pro Phe Gln Gln Gln Leu Ile Met His Thr Phe Tyr Phe Ile
                      165                      170                      175

gcg tct atc aaa gca ccc gaa aag aca cac cag tta ttt gcc acg ttt 576
Ala Ser Ile Lys Ala Pro Glu Lys Thr His Gln Leu Phe Ala Thr Phe
                      180                      185                      190

aag caa cac ttt ggt tta ttt gaa acc acg gac gac gtg tta cag acg 624
Lys Gln His Phe Gly Leu Phe Glu Thr Thr Asp Asp Val Leu Gln Thr
                      195                      200                      205

ttt aag cag aaa gcc agc gtt ttt gtt atc ccg cgt cgt cac ggg aaa 672
Phe Lys Gln Lys Ala Ser Val Phe Val Ile Pro Arg Arg His Gly Lys
    210                      215                      220

aca tgg atc gtg gtc gcc att atc agc gtt ctt ctc tcg tcg gtt gaa 720
Thr Trp Ile Val Val Ala Ile Ile Ser Val Leu Leu Ser Ser Val Glu
    225                      230                      235                      240

aac gtt cac gtg ggt tac gtg gcc cac caa aaa cac gtc gcc aat gcc 768
Asn Val His Val Gly Tyr Val Ala His Gln Lys His Val Ala Asn Ala
                      245                      250                      255

gtt ttc tcc gag gtc atc gcc acg cta tcc agg tgg ttt ccg gcg aag 816
Val Phe Ser Glu Val Ile Ala Thr Leu Ser Arg Trp Phe Pro Ala Lys
                      260                      265                      270

aac ctg aac ata aag aag gaa aac gga acc atc gtg tac gcg agc ccc 864
Asn Leu Asn Ile Lys Lys Glu Asn Gly Thr Ile Val Tyr Ala Ser Pro
                      275                      280                      285

gga cgg cgg ccg agt tcg ctg atg tgt gcg acg tgc ttc aat aag aac 912
Gly Arg Arg Pro Ser Ser Leu Met Cys Ala Thr Cys Phe Asn Lys Asn
    290                      295                      300

gta agc aga tgc ttt tta agt tct ggc agc cgt ata gca tca cgc gac 960
Val Ser Arg Cys Phe Leu Ser Ser Gly Ser Arg Ile Ala Ser Arg Asp
    305                      310                      315                      320

tgg cta aat ccg gca ggc gaa tga 984
Trp Leu Asn Pro Ala Gly Glu
                      325

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<210> 63
<211> 327
<212> PRT
<213> Macaca mulatta rhadinovirus 17577

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<400> 63
Met Leu Leu Thr Ser Tyr Arg Glu Arg Leu Gln Asn Asn Leu Arg Val

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1	5	10	15
Val Thr Asp Gly Gly Cys Glu Asn Trp Phe Arg Gln Pro Pro Val Ile			
	20	25	30
Ile Ser Gly Asn Asp Lys Thr Glu Arg Met Ala His Pro Cys Leu Gly			
	35	40	45
Val Ile His Ala Val Asn Ala Tyr Ser Ser Val Leu Asp Asp Tyr Leu			
	50	55	60
Gln Thr Tyr Arg Arg Val Gln Glu Pro Met Pro Ala Pro Thr Leu Gly			
	65	70	75
Lys Pro Arg Ile Ser Ser His Ala Thr Leu Pro Arg Leu Thr Glu Glu			
	85	90	95
Leu Thr Asn Tyr Leu Lys Gln Thr Cys Cys Arg Val Gln Met Ala Asn			
	100	105	110
Ala Lys Asp Gln Tyr Met Glu Tyr Gln Ser Ala Gln Arg Thr His Glu			
	115	120	125
Ala Phe Leu Glu Cys Pro Val Tyr Ala Glu Leu Arg Gln Phe Leu Ala			
	130	135	140
Asn Leu Ser Ser Phe Leu Asn Gly Ser Tyr Val Pro Gly Val Cys Cys			
	145	150	155
Leu Glu Pro Phe Gln Gln Gln Leu Ile Met His Thr Phe Tyr Phe Ile			
	165	170	175
Ala Ser Ile Lys Ala Pro Glu Lys Thr His Gln Leu Phe Ala Thr Phe			
	180	185	190
Lys Gln His Phe Gly Leu Phe Glu Thr Thr Asp Asp Val Leu Gln Thr			
	195	200	205
Phe Lys Gln Lys Ala Ser Val Phe Val Ile Pro Arg Arg His Gly Lys			
	210	215	220
Thr Trp Ile Val Val Ala Ile Ile Ser Val Leu Leu Ser Ser Val Glu			
	225	230	235
Asn Val His Val Gly Tyr Val Ala His Gln Lys His Val Ala Asn Ala			
	245	250	255
Val Phe Ser Glu Val Ile Ala Thr Leu Ser Arg Trp Phe Pro Ala Lys			
	260	265	270
Asn Leu Asn Ile Lys Lys Glu Asn Gly Thr Ile Val Tyr Ala Ser Pro			
	275	280	285
Gly Arg Arg Pro Ser Ser Leu Met Cys Ala Thr Cys Phe Asn Lys Asn			
	290	295	300
Val Ser Arg Cys Phe Leu Ser Ser Gly Ser Arg Ile Ala Ser Arg Asp			
	305	310	315
Trp Leu Asn Pro Ala Gly Glu			320
	325		

<210> 64  
 <211> 984  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(984)

<400> 64	
atg ttc cct tca agt ttt ttg aat aac ggg cac ccc gaa acg gaa cgc	48
Met Phe Pro Ser Ser Phe Leu Asn Asn Gly His Pro Glu Thr Glu Arg	
1 5 10 15	
cgc ttc gtt aaa ggc gtt cag tta gct tta gac ctg tgt gac aac act	96
Arg Phe Val Lys Gly Val Gln Leu Ala Leu Asp Leu Cys Asp Asn Thr	
20 25 30	

ccg gga cag ttt aaa cta gtt gaa aca cct ctt aat agt ttt ctt ctg	144
Pro Gly Gln Phe Lys Leu Val Glu Thr Pro Leu Asn Ser Phe Leu Leu	
35 40 45	
gta tcc aac gtt ctg ccg gaa tcg cgc ccg gtt aga gac tgt ccg cag	192
Val Ser Asn Val Leu Pro Glu Ser Arg Pro Val Arg Asp Cys Pro Gln	
50 55 60	
ccg gaa ggg ttt gac ttt gaa cac att cac ctc cca aaa cta aca cgc	240
Pro Glu Gly Phe Asp Phe Glu His Ile His Leu Pro Lys Leu Thr Arg	
65 70 75 80	
atg cag cgt gtc ctg ggg cga tac tgc gac cat gtt aac aac gac gac	288
Met Gln Arg Val Leu Gly Arg Tyr Cys Asp His Val Asn Asn Asp Asp	
85 90 95	
acg tgc gtt aac gta aag gca agt tcc tcg aat tca cag ggt gcc ttg	336
Thr Cys Val Asn Val Lys Ala Ser Ser Ser Asn Ser Gln Gly Ala Leu	
100 105 110	
ttt tat ctg ccg tat gga cag gac gaa tgg aat tgg gcg ctc acg tta	384
Phe Tyr Leu Pro Tyr Gly Gln Asp Glu Trp Asn Trp Ala Leu Thr Leu	
115 120 125	
agg aaa gac aag ttg gtt aaa atg gct gta gag ggc ttg tca aat ccc	432
Arg Lys Asp Lys Leu Val Lys Met Ala Val Glu Gly Leu Ser Asn Pro	
130 135 140	
acg acc tgg aaa ggt tta gag ccc gtg gat cct tta ccg ctc ata tgg	480
Thr Thr Trp Lys Gly Leu Glu Pro Val Asp Pro Leu Pro Leu Ile Trp	
145 150 155 160	
ctt ctg ttt tac ggt tcc cgg tcg ttc tgt cgg gaa cca gag tgc cta	528
Leu Leu Phe Tyr Gly Ser Arg Ser Phe Cys Arg Glu Pro Glu Cys Leu	
165 170 175	
tat gaa cgc aat ttt ggt atg aag gga ccc ata ctc tta ccg cca cat	576
Tyr Glu Arg Asn Phe Gly Met Lys Gly Pro Ile Leu Leu Pro Pro His	
180 185 190	
atg tat gcc ccc caa aag gac gta atg act ttt gtc cat cat gta att	624
Met Tyr Ala Pro Gln Lys Asp Val Met Thr Phe Val His His Val Ile	
195 200 205	
aag tac gtt aaa ttt tta tac gtg aac gcc ggt ggg ggt ctt gaa act	672
Lys Tyr Val Lys Phe Leu Tyr Val Asn Ala Gly Gly Gly Leu Glu Thr	
210 215 220	
gaa ccg tcc ccg ccg ttc gag gcc tcg cgg ttg cgc gca gcc atc gct	720
Glu Pro Ser Pro Pro Phe Glu Ala Ser Arg Leu Arg Ala Ala Ile Ala	
225 230 235 240	
cgt ctc ggg gac gtg gaa gcg gat gac gca tac ctg tcc gca aag tgc	768
Arg Leu Gly Asp Val Glu Ala Asp Asp Ala Tyr Leu Ser Ala Lys Cys	
245 250 255	
atg ttg tgt cac ctg tac aag caa aac gat acg att tcg att cat gaa	816
Met Leu Cys His Leu Tyr Lys Gln Asn Asp Thr Ile Ser Ile His Glu	
260 265 270	

aca cac gtg ggc gga gtc atc gca tta ggc gga gac ggt gcg aga tat 864  
 Thr His Val Gly Gly Val Ile Ala Leu Gly Gly Asp Gly Ala Arg Tyr  
           275                                  280                                  285

ata acg tct agt gtt cgg gct caa cgg tgc acg agt cgg gga gat ttt 912  
 Ile Thr Ser Ser Val Arg Ala Gln Arg Cys Thr Ser Arg Gly Asp Phe  
           290                                  295                                  300

gtt tta atc ccc ctg tac aac att gaa ggg ctc gta agc atg ata agg 960  
 Val Leu Ile Pro Leu Tyr Asn Ile Glu Gly Leu Val Ser Met Ile Arg  
 305                                  310                                  315                                  320

gaa cat ggc ctc ggc agc agc taa 984  
 Glu His Gly Leu Gly Ser Ser  
                                   325

<210> 65

<211> 327

<212> PRT

<213> Macaca mulatta rhadinovirus 17577

<400> 65

Met Phe Pro Ser Ser Phe Leu Asn Asn Gly His Pro Glu Thr Glu Arg  
   1                                  5                                  10                                  15  
 Arg Phe Val Lys Gly Val Gln Leu Ala Leu Asp Leu Cys Asp Asn Thr  
                                   20                                  25                                  30  
 Pro Gly Gln Phe Lys Leu Val Glu Thr Pro Leu Asn Ser Phe Leu Leu  
                                   35                                  40                                  45  
 Val Ser Asn Val Leu Pro Glu Ser Arg Pro Val Arg Asp Cys Pro Gln  
   50                                  55                                  60  
 Pro Glu Gly Phe Asp Phe Glu His Ile His Leu Pro Lys Leu Thr Arg  
   65                                  70                                  75                                  80  
 Met Gln Arg Val Leu Gly Arg Tyr Cys Asp His Val Asn Asn Asp Asp  
                                   85                                  90                                  95  
 Thr Cys Val Asn Val Lys Ala Ser Ser Ser Asn Ser Gln Gly Ala Leu  
                                   100                                  105                                  110  
 Phe Tyr Leu Pro Tyr Gly Gln Asp Glu Trp Asn Trp Ala Leu Thr Leu  
                                   115                                  120                                  125  
 Arg Lys Asp Lys Leu Val Lys Met Ala Val Glu Gly Leu Ser Asn Pro  
   130                                  135                                  140  
 Thr Thr Trp Lys Gly Leu Glu Pro Val Asp Pro Leu Pro Leu Ile Trp  
   145                                  150                                  155                                  160  
 Leu Leu Phe Tyr Gly Ser Arg Ser Phe Cys Arg Glu Pro Glu Cys Leu  
                                   165                                  170                                  175  
 Tyr Glu Arg Asn Phe Gly Met Lys Gly Pro Ile Leu Leu Pro Pro His  
                                   180                                  185                                  190  
 Met Tyr Ala Pro Gln Lys Asp Val Met Thr Phe Val His His Val Ile  
                                   195                                  200                                  205  
 Lys Tyr Val Lys Phe Leu Tyr Val Asn Ala Gly Gly Gly Leu Glu Thr  
   210                                  215                                  220  
 Glu Pro Ser Pro Pro Phe Glu Ala Ser Arg Leu Arg Ala Ala Ile Ala  
   225                                  230                                  235                                  240  
 Arg Leu Gly Asp Val Glu Ala Asp Asp Ala Tyr Leu Ser Ala Lys Cys  
                                   245                                  250                                  255  
 Met Leu Cys His Leu Tyr Lys Gln Asn Asp Thr Ile Ser Ile His Glu  
                                   260                                  265                                  270  
 Thr His Val Gly Gly Val Ile Ala Leu Gly Gly Asp Gly Ala Arg Tyr  
                                   275                                  280                                  285  
 Ile Thr Ser Ser Val Arg Ala Gln Arg Cys Thr Ser Arg Gly Asp Phe  
   290                                  295                                  300

Val Leu Ile Pro Leu Tyr Asn Ile Glu Gly Leu Val Ser Met Ile Arg  
 305 310 315 320  
 Glu His Gly Leu Gly Ser Ser  
 325

<210> 66  
 <211> 450  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1) .. (450)

<400> 66  
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 Met Ala Ser Ala Ala Lys Lys Met Leu Ile Lys Ser Glu Leu Glu  
 1 5 10 15  
 tcg gaa atc aac aaa aaa ctg tcc atc tcc gta ttt gac agg ttt ggg 96  
 Ser Glu Ile Asn Lys Lys Leu Ser Ile Ser Val Phe Asp Arg Phe Gly  
 20 25 30  
 gcc gac agt gcc gtg ttt aac gcg cag tat aag gga acc agg gaa tcg 144  
 Ala Asp Ser Ala Val Phe Asn Ala Gln Tyr Lys Gly Thr Arg Glu Ser  
 35 40 45  
 ctg cgg tcg tac aac agc cta aaa aag aag gac gat ctg gcg acc gtt 192  
 Leu Arg Ser Tyr Asn Ser Leu Lys Lys Lys Asp Asp Leu Ala Thr Val  
 50 55 60  
 gtc gga acg cta gaa acg tcg ctg cgt gaa aaa caa agc gaa ttg gga 240  
 Val Gly Thr Leu Glu Thr Ser Leu Arg Glu Lys Gln Ser Glu Leu Gly  
 65 70 75 80  
 tta cta aag ggg ttt aac agg aaa aaa att gaa gag ttt gac gct gtg 288  
 Leu Leu Lys Gly Phe Asn Arg Lys Lys Ile Glu Glu Phe Asp Ala Val  
 85 90 95  
 gcg gac gcg gtt cgc gac ctc aag gac gag ctg tac gga gaa ctg gag 336  
 Ala Asp Ala Val Arg Asp Leu Lys Asp Glu Leu Tyr Gly Glu Leu Glu  
 100 105 110  
 att cta ggt acg ctt gac aat gaa tct gtt ccc gtg gaa gaa gag tcc 384  
 Ile Leu Gly Thr Leu Asp Asn Glu Ser Val Pro Val Glu Glu Glu Ser  
 115 120 125  
 ccc aag gac gac att att agg tgg aaa ttg gag cgt ctg ccc aga gtg 432  
 Pro Lys Asp Asp Ile Ile Arg Trp Lys Leu Glu Arg Leu Pro Arg Val  
 130 135 140  
 tgc ccc aaa agc cct tga 450  
 Cys Pro Lys Ser Pro  
 145 150

<210> 67  
 <211> 149  
 <212> PRT

<213> Macaca mulatta rhadinovirus 17577

<400> 67

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Met Ala Ser Ala Ala Ala Lys Lys Met Leu Ile Lys Ser Glu Leu Glu
 1           5           10           15
Ser Glu Ile Asn Lys Lys Leu Ser Ile Ser Val Phe Asp Arg Phe Gly
          20           25           30
Ala Asp Ser Ala Val Phe Asn Ala Gln Tyr Lys Gly Thr Arg Glu Ser
          35           40           45
Leu Arg Ser Tyr Asn Ser Leu Lys Lys Lys Asp Asp Leu Ala Thr Val
          50           55           60
Val Gly Thr Leu Glu Thr Ser Leu Arg Glu Lys Gln Ser Glu Leu Gly
          65           70           75           80
Leu Leu Lys Gly Phe Asn Arg Lys Lys Ile Glu Glu Phe Asp Ala Val
          85           90           95
Ala Asp Ala Val Arg Asp Leu Lys Asp Glu Leu Tyr Gly Glu Leu Glu
          100          105          110
Ile Leu Gly Thr Leu Asp Asn Glu Ser Val Pro Val Glu Glu Ser
          115          120          125
Pro Lys Asp Asp Ile Ile Arg Trp Lys Leu Glu Arg Leu Pro Arg Val
          130          135          140
Cys Pro Lys Ser Pro
145

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<210> 68

<211> 1308

<212> DNA

<213> Macaca mulatta rhadinovirus 17577

<220>

<221> CDS

<222> (1)..(1308)

<400> 68

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atg aat ctg ttc ccg tgg aag aag agt ccc cca agg acg aca tta tta 48
Met Asn Leu Phe Pro Trp Lys Lys Ser Pro Pro Arg Thr Thr Leu Leu
 1           5           10           15

ggt gga aat tgg agc gtc tgc cca gag tgt gcc cca aaa gcc ctt gat 96
Gly Gly Asn Trp Ser Val Cys Pro Glu Cys Ala Pro Lys Ala Leu Asp
          20           25           30

ccc att ccc aag gtt cag act gac gtc gac aga aca gca tcg tcc cat 144
Pro Ile Pro Lys Val Gln Thr Asp Val Asp Arg Thr Ala Ser Ser His
          35           40           45

ata acc gtc att aaa aca cgt aag acg atc gcc caa ctg aag ata cct 192
Ile Thr Val Ile Lys Thr Arg Lys Thr Ile Ala Gln Leu Lys Ile Pro
          50           55           60

aac aac tgg ggc cag tgt agt cac cag gcg acg gac tgg acc gcc gtg 240
Asn Asn Trp Gly Gln Cys Ser His Gln Ala Thr Asp Trp Thr Ala Val
          65           70           75           80

ctc gga cgc ggc tcg tat ggt gtg gtg agg tcc atg tct ctc ggc cgc 288
Leu Gly Arg Gly Ser Tyr Gly Val Val Arg Ser Met Ser Leu Gly Arg
          85           90           95

tgc gtt aag cat ttt ggc agc cgg cgt gag ttt ttt tac gag tgc att 336

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Cys	Val	Lys	His	Phe	Gly	Ser	Arg	Arg	Glu	Phe	Phe	Tyr	Glu	Cys	Ile		
			100					105					110				
ttt	aac	gat	ata	gta	cgc	gcc	tgc	cgg	gag	aaa	cat	ccc	ctg	aac	cgc	384	
Phe	Asn	Asp	Ile	Val	Arg	Ala	Cys	Arg	Glu	Lys	His	Pro	Leu	Asn	Arg		
		115					120					125					
ggg	ggt	gac	cgt	ata	cta	tgt	ttc	cta	gag	ccg	tgc	gta	cca	tgt	cgc	432	
Gly	Gly	Asp	Arg	Ile	Leu	Cys	Phe	Leu	Glu	Pro	Cys	Val	Pro	Cys	Arg		
	130					135					140						
gcc	ctg	ata	ttc	ccg	cag	tta	aca	ggg	aat	ctg	cta	aac	gcg	gat	ctt	480	
Ala	Leu	Ile	Phe	Pro	Gln	Leu	Thr	Gly	Asn	Leu	Leu	Asn	Ala	Asp	Leu		
145					150					155					160		
aaa	cac	gtg	aac	cct	gaa	cgg	ctg	gcc	gtt	gaa	ttc	tct	gag	ctg	agg	528	
Lys	His	Val	Asn	Pro	Glu	Arg	Leu	Ala	Val	Glu	Phe	Ser	Glu	Leu	Arg		
			165						170					175			
gaa	ggc	gtt	agt	ttt	cta	aat	aat	ata	tgt	ggc	atc	gtt	cac	tgt	gac	576	
Glu	Gly	Val	Ser	Phe	Leu	Asn	Asn	Ile	Cys	Gly	Ile	Val	His	Cys	Asp		
		180						185					190				
atc	agt	cca	gaa	aat	ata	ctg	ata	aag	ggg	gaa	ctg	aca	act	gcg	tac	624	
Ile	Ser	Pro	Glu	Asn	Ile	Leu	Ile	Lys	Gly	Glu	Leu	Thr	Thr	Ala	Tyr		
		195					200					205					
ggg	aga	ctt	atg	atc	gga	gat	cta	ggg	tcc	gcc	tct	tta	cac	acg	gga	672	
Gly	Arg	Leu	Met	Ile	Gly	Asp	Leu	Gly	Ser	Ala	Ser	Leu	His	Thr	Gly		
	210					215					220						
acc	cct	tgg	acc	gga	gtg	atg	gtg	acc	tcc	aaa	ctc	ggg	ttc	gtg	cag	720	
Thr	Pro	Trp	Thr	Gly	Val	Met	Val	Thr	Ser	Lys	Leu	Gly	Phe	Val	Gln		
225					230					235					240		
cac	acg	tac	cat	ttt	aag	gca	ccg	gcc	aga	ttt	atc	tgt	aag	cac	att	768	
His	Thr	Tyr	His	Phe	Lys	Ala	Pro	Ala	Arg	Phe	Ile	Cys	Lys	His	Ile		
			245						250					255			
tac	cgg	ccg	tcg	tgt	ctc	ctc	tac	cgg	tgt	ctg	ctg	tcg	tgc	gcc	ggg	816	
Tyr	Arg	Pro	Ser	Cys	Leu	Leu	Tyr	Arg	Cys	Leu	Leu	Ser	Cys	Ala	Gly		
			260					265					270				
ggc	ccg	cag	gcg	cat	atg	cta	aat	cag	ccg	ttc	caa	atc	act	cca	caa	864	
Gly	Pro	Gln	Ala	His	Met	Leu	Asn	Gln	Pro	Phe	Gln	Ile	Thr	Pro	Gln		
		275					280					285					
ctc	ggt	ctc	aca	att	gac	ata	tcg	tcc	ctg	ggt	tat	agt	ttg	cta	gca	912	
Leu	Gly	Leu	Thr	Ile	Asp	Ile	Ser	Ser	Leu	Gly	Tyr	Ser	Leu	Leu	Ala		
	290					295					300						
tgc	cta	gag	aaa	tat	ctt	cag	cca	gct	gac	cca	ttt	ccc	cag	cag	gga	960	
Cys	Leu	Glu	Lys	Tyr	Leu	Gln	Pro	Ala	Asp	Pro	Phe	Pro	Gln	Gln	Gly		
305					310					315					320		
gcg	ttg	gcg	gac	gct	tcc	tcc	gaa	tcc	gcc	cac	cca	ttg	ttc	tat	ttg	1008	
Ala	Leu	Ala	Asp	Ala	Ser	Ser	Glu	Ser	Ala	His	Pro	Leu	Phe	Tyr	Leu		
			325						330					335			
cgt	tgc	atg	gtg	cca	aga	gta	gtc	atc	gcc	gag	att	ttt	tct	gtt	gcc	1056	
Arg	Cys	Met	Val	Pro	Arg	Val	Val	Ile	Ala	Glu	Ile	Phe	Ser	Val	Ala		



340	345	350	
tgg gac gtt cca ctc gat tta ggc att gac tca tct ggc cac gcg cca			1104
Trp Asp Val Pro Leu Asp Leu Gly Ile Asp Ser Ser Gly His Ala Pro			
355	360	365	
gct att ccc ctg aga gaa gcg tac agg cgg ttt ttt gcc aac cag tgt			1152
Ala Ile Pro Leu Arg Glu Ala Tyr Arg Arg Phe Phe Ala Asn Gln Cys			
370	375	380	
agt tta tat agg gcg caa tac aaa gag gat gcg tta gaa aac gca tcc			1200
Ser Leu Tyr Arg Ala Gln Tyr Lys Glu Asp Ala Leu Glu Asn Ala Ser			
385	390	395	400
tcg cgg ctg tgt aac tca aaa ctt aaa cta gtt ctc cag aag ctg ttg			1248
Ser Arg Leu Cys Asn Ser Lys Leu Lys Leu Val Leu Gln Lys Leu Leu			
405	410	415	
gtc agg gac tac ttt agt cat tgc gga aac tgc gga gat cat gga ttt			1296
Val Arg Asp Tyr Phe Ser His Cys Gly Asn Cys Gly Asp His Gly Phe			
420	425	430	
ttt ctc aga tga			1308
Phe Leu Arg			
435			

<210> 69  
 <211> 435  
 <212> PRT  
 <213> Macaca mulatta rhadinovirus 17577

<400> 69  
 Met Asn Leu Phe Pro Trp Lys Lys Ser Pro Pro Arg Thr Thr Leu Leu  
 1 5 10 15  
 Gly Gly Asn Trp Ser Val Cys Pro Glu Cys Ala Pro Lys Ala Leu Asp  
 20 25 30  
 Pro Ile Pro Lys Val Gln Thr Asp Val Asp Arg Thr Ala Ser Ser His  
 35 40 45  
 Ile Thr Val Ile Lys Thr Arg Lys Thr Ile Ala Gln Leu Lys Ile Pro  
 50 55 60  
 Asn Asn Trp Gly Gln Cys Ser His Gln Ala Thr Asp Trp Thr Ala Val  
 65 70 75 80  
 Leu Gly Arg Gly Ser Tyr Gly Val Val Arg Ser Met Ser Leu Gly Arg  
 85 90 95  
 Cys Val Lys His Phe Gly Ser Arg Arg Glu Phe Phe Tyr Glu Cys Ile  
 100 105 110  
 Phe Asn Asp Ile Val Arg Ala Cys Arg Glu Lys His Pro Leu Asn Arg  
 115 120 125  
 Gly Gly Asp Arg Ile Leu Cys Phe Leu Glu Pro Cys Val Pro Cys Arg  
 130 135 140  
 Ala Leu Ile Phe Pro Gln Leu Thr Gly Asn Leu Leu Asn Ala Asp Leu  
 145 150 155 160  
 Lys His Val Asn Pro Glu Arg Leu Ala Val Glu Phe Ser Glu Leu Arg  
 165 170 175  
 Glu Gly Val Ser Phe Leu Asn Asn Ile Cys Gly Ile Val His Cys Asp  
 180 185 190  
 Ile Ser Pro Glu Asn Ile Leu Ile Lys Gly Glu Leu Thr Thr Ala Tyr  
 195 200 205  
 Gly Arg Leu Met Ile Gly Asp Leu Gly Ser Ala Ser Leu His Thr Gly  
 210 215 220

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Thr Pro Trp Thr Gly Val Met Val Thr Ser Lys Leu Gly Phe Val Gln
225                               230           235           240
His Thr Tyr His Phe Lys Ala Pro Ala Arg Phe Ile Cys Lys His Ile
                               245           250           255
Tyr Arg Pro Ser Cys Leu Leu Tyr Arg Cys Leu Leu Ser Cys Ala Gly
                               260           265           270
Gly Pro Gln Ala His Met Leu Asn Gln Pro Phe Gln Ile Thr Pro Gln
                               275           280           285
Leu Gly Leu Thr Ile Asp Ile Ser Ser Leu Gly Tyr Ser Leu Leu Ala
                               290           295           300
Cys Leu Glu Lys Tyr Leu Gln Pro Ala Asp Pro Phe Pro Gln Gln Gly
305                               310           315           320
Ala Leu Ala Asp Ala Ser Ser Glu Ser Ala His Pro Leu Phe Tyr Leu
                               325           330           335
Arg Cys Met Val Pro Arg Val Val Ile Ala Glu Ile Phe Ser Val Ala
                               340           345           350
Trp Asp Val Pro Leu Asp Leu Gly Ile Asp Ser Ser Gly His Ala Pro
                               355           360           365
Ala Ile Pro Leu Arg Glu Ala Tyr Arg Arg Phe Phe Ala Asn Gln Cys
                               370           375           380
Ser Leu Tyr Arg Ala Gln Tyr Lys Glu Asp Ala Leu Glu Asn Ala Ser
385                               390           395           400
Ser Arg Leu Cys Asn Ser Lys Leu Lys Leu Val Leu Gln Lys Leu Leu
                               405           410           415
Val Arg Asp Tyr Phe Ser His Cys Gly Asn Cys Gly Asp His Gly Phe
                               420           425           430
Phe Leu Arg
                               435

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<210> 70
<211> 1443
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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<220>
<221> CDS
<222> (1)..(1443)

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<400> 70
atg gat ttt ttc tca gat gag ccg atg gtt cag gag atg gcg ctt ctc      48
Met Asp Phe Phe Ser Asp Glu Pro Met Val Gln Glu Met Ala Leu Leu
  1                               5                               10          15

gac atc gat gag cag cag cgg ctc ctc tcg aaa atg agc ctg gcc aac      96
Asp Ile Asp Glu Gln Gln Arg Leu Leu Ser Lys Met Ser Leu Ala Asn
                20                               25          30

ttt tta aaa cat gag cga gta agg gcg ttt ttt agc gat aac aaa aag     144
Phe Leu Lys His Glu Arg Val Arg Ala Phe Phe Ser Asp Asn Lys Lys
                35                               40          45

gaa ata agc atg ccg gct ata cgg ttc gtg tat aat ttt tat cta ttc     192
Glu Ile Ser Met Pro Ala Ile Arg Phe Val Tyr Asn Phe Tyr Leu Phe
                50                               55          60

gcc aag gtg gga gat ttt atc ggc aac acc gac gtg tac gat ttt tac     240
Ala Lys Val Gly Asp Phe Ile Gly Asn Thr Asp Val Tyr Asp Phe Tyr
        65                               70          75          80

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gtc act tgc gtg ttc agg ggg agg cgc ctg acg cgc ctg tcg gaa gtg	288
Val Thr Cys Val Phe Arg Gly Arg Arg Leu Thr Arg Leu Ser Glu Val	
85 90 95	
tac gac gcg tgc cta aac atg cac ccg cac gat cga cac cac gtg tgt	336
Tyr Asp Ala Cys Leu Asn Met His Pro His Asp Arg His His Val Cys	
100 105 110	
gca ttg ata gaa cag gtc acg cgc ggc caa aac atc aat cct ctg tgg	384
Ala Leu Ile Glu Gln Val Thr Arg Gly Gln Asn Ile Asn Pro Leu Trp	
115 120 125	
gac gct ctg agg gac ggc ata att tcg tcg tca aaa ttt cac tgg gcc	432
Asp Ala Leu Arg Asp Gly Ile Ile Ser Ser Ser Lys Phe His Trp Ala	
130 135 140	
ata aaa caa cag aat tcg tcc aaa aaa att ttt aac ccg tgg cct ata	480
Ile Lys Gln Gln Asn Ser Ser Lys Lys Ile Phe Asn Pro Trp Pro Ile	
145 150 155 160	
gtc aac aat cac ttt gta gcg ggc ccg ctc gcg ttt gga ctg cgt tgc	528
Val Asn Asn His Phe Val Ala Gly Pro Leu Ala Phe Gly Leu Arg Cys	
165 170 175	
gag gaa gtg gtt aaa aag ata ctg gcg acg ttg ctg cat cca ggc gag	576
Glu Glu Val Val Lys Lys Ile Leu Ala Thr Leu Leu His Pro Gly Glu	
180 185 190	
gcg cac tgt gaa aac tac gga ttc atg cag agt cct ctc aac ggg gtt	624
Ala His Cys Glu Asn Tyr Gly Phe Met Gln Ser Pro Leu Asn Gly Val	
195 200 205	
ttt ggc gtc tcc ttg gat ttt gga att aac gtc agg tct gac cca aaa	672
Phe Gly Val Ser Leu Asp Phe Gly Ile Asn Val Arg Ser Asp Pro Lys	
210 215 220	
gac ggt ttg gag ttt cac cca gac tgc aaa atc tat gaa ata aaa tgc	720
Asp Gly Leu Glu Phe His Pro Asp Cys Lys Ile Tyr Glu Ile Lys Cys	
225 230 235 240	
cgg ttt aag tac act ttt tcc aag atg gag tgt gac ccg att tac gct	768
Arg Phe Lys Tyr Thr Phe Ser Lys Met Glu Cys Asp Pro Ile Tyr Ala	
245 250 255	
gcg tat gct aaa ctt tat cag aag ccc agc atg cag acg ctt aag ggg	816
Ala Tyr Ala Lys Leu Tyr Gln Lys Pro Ser Met Gln Thr Leu Lys Gly	
260 265 270	
ttt ttg tac tcc ata tct aaa ccg gcg atc gag ttt gtc gga gag gac	864
Phe Leu Tyr Ser Ile Ser Lys Pro Ala Ile Glu Phe Val Gly Glu Asp	
275 280 285	
agg ctc ccc agt gaa tcg gac tat ctt gtg gca tat gac aaa gaa tgg	912
Arg Leu Pro Ser Glu Ser Asp Tyr Leu Val Ala Tyr Asp Lys Glu Trp	
290 295 300	
gag gtg tgt ccg cgg aaa aag aga cgc tta act gca gta cac cat cta	960
Glu Val Cys Pro Arg Lys Lys Arg Arg Leu Thr Ala Val His His Leu	
305 310 315 320	
gtt aaa aag tgc atg att cac aac tct acg gcg cct tct gat gtg tat	1008

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Val Lys Lys Cys Met Ile His Asn Ser Thr Ala Pro Ser Asp Val Tyr
      325                                330                        335

ata ttg tca gat ccg cag gaa acc gga ggc caa att aat att aaa gct 1056
Ile Leu Ser Asp Pro Gln Glu Thr Gly Gly Gln Ile Asn Ile Lys Ala
      340                                345                        350

cat ctg agc gcc aac cta ttt ata aac gtc agg cat ccg tat tat tat 1104
His Leu Ser Ala Asn Leu Phe Ile Asn Val Arg His Pro Tyr Tyr Tyr
      355                                360                        365

caa gtg ttg ctc cag tct ctc gtt gta cag gag tac atc agt ctc tcc 1152
Gln Val Leu Leu Gln Ser Leu Val Val Gln Glu Tyr Ile Ser Leu Ser
      370                                375                        380

aag gga act aaa aat ttg gga acc cag aaa aac ttt ata gcg act ggc 1200
Lys Gly Thr Lys Asn Leu Gly Thr Gln Lys Asn Phe Ile Ala Thr Gly
      385                                390                        400

ttt ttt aga aaa cgg cag ttt caa gac ccg agc tgc tgc acg atc ggt 1248
Phe Phe Arg Lys Arg Gln Phe Gln Asp Pro Ser Cys Cys Thr Ile Gly
      405                                410                        415

gaa ttt gcc ccg ttg gat cca cac gta gag ata ccg acc ctt tta atc 1296
Glu Phe Ala Pro Leu Asp Pro His Val Glu Ile Pro Thr Leu Leu Ile
      420                                425                        430

gtg aca ccg gtg tat ttt ccc agc gtg gcc aaa cac caa ctg gtg aag 1344
Val Thr Pro Val Tyr Phe Pro Ser Val Ala Lys His Gln Leu Val Lys
      435                                440                        445

cag gcg acc gaa ttc tgg gcg gct agt gct cgt gag gca ttt ccc gag 1392
Gln Ala Thr Glu Phe Trp Ala Ala Ser Ala Arg Glu Ala Phe Pro Glu
      450                                455                        460

cta cca tgg gat tta tcc tct ctg tgt gca aac gcc cca cca aca ccg 1440
Leu Pro Trp Asp Leu Ser Ser Leu Cys Ala Asn Ala Pro Pro Thr Pro
      465                                470                        475                        480

tag 1443

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<210> 71
<211> 480
<212> PRT
<213> Macaca mulatta rhadinovirus 17577

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<400> 71
Met Asp Phe Phe Ser Asp Glu Pro Met Val Gln Glu Met Ala Leu Leu
  1          5          10          15
Asp Ile Asp Glu Gln Gln Arg Leu Leu Ser Lys Met Ser Leu Ala Asn
      20          25          30
Phe Leu Lys His Glu Arg Val Arg Ala Phe Phe Ser Asp Asn Lys Lys
      35          40          45
Glu Ile Ser Met Pro Ala Ile Arg Phe Val Tyr Asn Phe Tyr Leu Phe
      50          55          60
Ala Lys Val Gly Asp Phe Ile Gly Asn Thr Asp Val Tyr Asp Phe Tyr
      65          70          75          80
Val Thr Cys Val Phe Arg Gly Arg Arg Leu Thr Arg Leu Ser Glu Val
      85          90          95

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Tyr Asp Ala Cys Leu Asn Met His Pro His Asp Arg His His Val Cys
      100      105      110
Ala Leu Ile Glu Gln Val Thr Arg Gly Gln Asn Ile Asn Pro Leu Trp
      115      120      125
Asp Ala Leu Arg Asp Gly Ile Ile Ser Ser Ser Lys Phe His Trp Ala
      130      135      140
Ile Lys Gln Gln Asn Ser Ser Lys Lys Ile Phe Asn Pro Trp Pro Ile
      145      150      155      160
Val Asn Asn His Phe Val Ala Gly Pro Leu Ala Phe Gly Leu Arg Cys
      165      170      175
Glu Glu Val Val Lys Lys Ile Leu Ala Thr Leu Leu His Pro Gly Glu
      180      185      190
Ala His Cys Glu Asn Tyr Gly Phe Met Gln Ser Pro Leu Asn Gly Val
      195      200      205
Phe Gly Val Ser Leu Asp Phe Gly Ile Asn Val Arg Ser Asp Pro Lys
      210      215      220
Asp Gly Leu Glu Phe His Pro Asp Cys Lys Ile Tyr Glu Ile Lys Cys
      225      230      235      240
Arg Phe Lys Tyr Thr Phe Ser Lys Met Glu Cys Asp Pro Ile Tyr Ala
      245      250      255
Ala Tyr Ala Lys Leu Tyr Gln Lys Pro Ser Met Gln Thr Leu Lys Gly
      260      265      270
Phe Leu Tyr Ser Ile Ser Lys Pro Ala Ile Glu Phe Val Gly Glu Asp
      275      280      285
Arg Leu Pro Ser Glu Ser Asp Tyr Leu Val Ala Tyr Asp Lys Glu Trp
      290      295      300
Glu Val Cys Pro Arg Lys Lys Arg Arg Leu Thr Ala Val His His Leu
      305      310      315      320
Val Lys Lys Cys Met Ile His Asn Ser Thr Ala Pro Ser Asp Val Tyr
      325      330      335
Ile Leu Ser Asp Pro Gln Glu Thr Gly Gly Gln Ile Asn Ile Lys Ala
      340      345      350
His Leu Ser Ala Asn Leu Phe Ile Asn Val Arg His Pro Tyr Tyr Tyr
      355      360      365
Gln Val Leu Leu Gln Ser Leu Val Val Gln Glu Tyr Ile Ser Leu Ser
      370      375      380
Lys Gly Thr Lys Asn Leu Gly Thr Gln Lys Asn Phe Ile Ala Thr Gly
      385      390      395      400
Phe Phe Arg Lys Arg Gln Phe Gln Asp Pro Ser Cys Cys Thr Ile Gly
      405      410      415
Glu Phe Ala Pro Leu Asp Pro His Val Glu Ile Pro Thr Leu Leu Ile
      420      425      430
Val Thr Pro Val Tyr Phe Pro Ser Val Ala Lys His Gln Leu Val Lys
      435      440      445
Gln Ala Thr Glu Phe Trp Ala Ala Ser Ala Arg Glu Ala Phe Pro Glu
      450      455      460
Leu Pro Trp Asp Leu Ser Ser Leu Cys Ala Asn Ala Pro Pro Thr Pro
      465      470      475      480

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<210> 72
<211> 210
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

<220>
<221> CDS
<222> (1)..(210)

<400> 72

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atg gga ttt atc ctc tct gtg tgc aaa cgc ccc acc aac acc gta gat 48
Met Gly Phe Ile Leu Ser Val Cys Lys Arg Pro Thr Asn Thr Val Asp
  1             5             10             15

gtg aag ggg gag ccc ata gat gta tcc aaa gaa ttc gat cct att ata 96
Val Lys Gly Glu Pro Ile Asp Val Ser Lys Glu Phe Asp Pro Ile Ile
             20             25             30

gga gaa gaa agc att gtc ttg tta acg gca gat ggg act gcc ccc gcg 144
Gly Glu Glu Ser Ile Val Leu Leu Thr Ala Asp Gly Thr Ala Pro Ala
             35             40             45

gcg ctg tac aaa ccc aaa acc aag cca tcc aaa cat aaa aac aat aaa 192
Ala Leu Tyr Lys Pro Lys Thr Lys Pro Ser Lys His Lys Asn Asn Lys
  50             55             60

ttg tca gat ttt gtt taa 210
Leu Ser Asp Phe Val
  65             70

```

<210> 73  
 <211> 69  
 <212> PRT  
 <213> Macaca mulatta rhadinovirus 17577

```

<400> 73
Met Gly Phe Ile Leu Ser Val Cys Lys Arg Pro Thr Asn Thr Val Asp
  1             5             10             15
Val Lys Gly Glu Pro Ile Asp Val Ser Lys Glu Phe Asp Pro Ile Ile
             20             25             30
Gly Glu Glu Ser Ile Val Leu Leu Thr Ala Asp Gly Thr Ala Pro Ala
             35             40             45
Ala Leu Tyr Lys Pro Lys Thr Lys Pro Ser Lys His Lys Asn Asn Lys
  50             55             60
Leu Ser Asp Phe Val
  65

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<210> 74  
 <211> 1137  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(1137)

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<400> 74
atg aaa att tca cgg agc gac tcg ttt atc tta tcg tca tgg gta aaa 48
Met Lys Ile Ser Arg Ser Asp Ser Phe Ile Leu Ser Ser Trp Val Lys
  1             5             10             15

cta ctg gtt att ctt gga ctt atg ttt ata atg tca gcg gta gtg cca 96
Leu Leu Val Ile Leu Gly Leu Met Phe Ile Met Ser Ala Val Val Pro
             20             25             30

ctg acc gcc aca ttc ccg gga ctt gga ttt ccg tgc tac ttt aac acg 144
Leu Thr Ala Thr Phe Pro Gly Leu Gly Phe Pro Cys Tyr Phe Asn Thr
             35             40             45

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ttg gtc aac tac agc gcg tta aac cta acg gtc aga agt tct gct aaa	192
Leu Val Asn Tyr Ser Ala Leu Asn Leu Thr Val Arg Ser Ser Ala Lys	
50 55 60	
cat ctg acg ccg act ttg ttt ttg gaa gca cca gaa atg ttt gtc tac	240
His Leu Thr Pro Thr Leu Phe Leu Glu Ala Pro Glu Met Phe Val Tyr	
65 70 75 80	
atc tcg tgg gcg ttt ttg gtg gac gga tat ctg ctg tgt tac tat gcg	288
Ile Ser Trp Ala Phe Leu Val Asp Gly Tyr Leu Leu Cys Tyr Tyr Ala	
85 90 95	
tgg gcc atc ctg gcc ata ttc aag gcc aag cgc gtg cac gcg aca aca	336
Trp Ala Ile Leu Ala Ile Phe Lys Ala Lys Arg Val His Ala Thr Thr	
100 105 110	
atg acc agc ctc cag aca tgg atc gtg ctc ata ggc tcc cac agt gta	384
Met Thr Ser Leu Gln Thr Trp Ile Val Leu Ile Gly Ser His Ser Val	
115 120 125	
gtt ttt atg tct att ttg agg ctg tgg acc atc cag tta ttt att cac	432
Val Phe Met Ser Ile Leu Arg Leu Trp Thr Ile Gln Leu Phe Ile His	
130 135 140	
gtt ctg tcg tac aaa cat ata ctt tta gcc tcg ttt gta tac tgt ata	480
Val Leu Ser Tyr Lys His Ile Leu Leu Ala Ser Phe Val Tyr Cys Ile	
145 150 155 160	
cat ttt tgc cta tcg ttt acg cac gtc cag gct atg ata tcg tgc aat	528
His Phe Cys Leu Ser Phe Thr His Val Gln Ala Met Ile Ser Cys Asn	
165 170 175	
tcg gcc acc tgg tct cta cgc gtc tta gag cag cag att cct gag aat	576
Ser Ala Thr Trp Ser Leu Arg Val Leu Glu Gln Gln Ile Pro Glu Asn	
180 185 190	
agc ttg cta gac acc ctg ttg cgt tac gga aaa ccg att ggc gcc aat	624
Ser Leu Leu Asp Thr Leu Leu Arg Tyr Gly Lys Pro Ile Gly Ala Asn	
195 200 205	
ctt tat ctg tcc tta ata gcc atg gag atg tta gta ttc tcc ctc gga	672
Leu Tyr Leu Ser Leu Ile Ala Met Glu Met Leu Val Phe Ser Leu Gly	
210 215 220	
acg atg atg gct att gga aac agt ttc tat atg ctc gtt tcc gat att	720
Thr Met Met Ala Ile Gly Asn Ser Phe Tyr Met Leu Val Ser Asp Ile	
225 230 235 240	
gtc ttt ggt tca ata aac ttg ttt ttt gtc ctt aca ata gct tgg tat	768
Val Phe Gly Ser Ile Asn Leu Phe Phe Val Leu Thr Ile Ala Trp Tyr	
245 250 255	
atc aac aca gaa cta ttt cta gta aag tac cta aag cac cag atc gga	816
Ile Asn Thr Glu Leu Phe Leu Val Lys Tyr Leu Lys His Gln Ile Gly	
260 265 270	
ttc tac gtt ggc gtt ttt gtc agt tac ctg att ctg ctt ctt ccc gtc	864
Phe Tyr Val Gly Val Phe Val Ser Tyr Leu Ile Leu Leu Leu Pro Val	
275 280 285	

```

gtt cga tac gac aag gta ttc ata tct gcc agc ctg cac aaa gtc ata 912
Val Arg Tyr Asp Lys Val Phe Ile Ser Ala Ser Leu His Lys Val Ile
290 295 300

gcc gtg aac atc tct atg att ccg atc act tgc atc cta gcc atc atc 960
Ala Val Asn Ile Ser Met Ile Pro Ile Thr Cys Ile Leu Ala Ile Ile
305 310 315 320

tta aga att atc aga aac gat tgg aaa tgg tgc gca aag tcg ccc gaa 1008
Leu Arg Ile Ile Arg Asn Asp Trp Lys Trp Cys Ala Lys Ser Pro Glu
325 330 335

tac gca ccc ctt cct caa ggc cct aaa gag aag acg aca aaa gtt aag 1056
Tyr Ala Pro Leu Pro Gln Gly Pro Lys Glu Lys Thr Thr Lys Val Lys
340 345 350

tac tcc ccg gaa ctg aac gcg tta tat gaa aca gaa gaa gac gtg agc 1104
Tyr Ser Pro Glu Leu Asn Ala Leu Tyr Glu Thr Glu Glu Asp Val Ser
355 360 365

gat tac gag gat gca tat cca aaa tac ata tga 1137
Asp Tyr Glu Asp Ala Tyr Pro Lys Tyr Ile
370 375

```

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<210> 75
<211> 378
<212> PRT
<213> Macaca mulatta rhadinovirus 17577

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<400> 75
Met Lys Ile Ser Arg Ser Asp Ser Phe Ile Leu Ser Ser Trp Val Lys
1 5 10 15
Leu Leu Val Ile Leu Gly Leu Met Phe Ile Met Ser Ala Val Val Pro
20 25 30
Leu Thr Ala Thr Phe Pro Gly Leu Gly Phe Pro Cys Tyr Phe Asn Thr
35 40 45
Leu Val Asn Tyr Ser Ala Leu Asn Leu Thr Val Arg Ser Ser Ala Lys
50 55 60
His Leu Thr Pro Thr Leu Phe Leu Glu Ala Pro Glu Met Phe Val Tyr
65 70 75 80
Ile Ser Trp Ala Phe Leu Val Asp Gly Tyr Leu Leu Cys Tyr Tyr Ala
85 90 95
Trp Ala Ile Leu Ala Ile Phe Lys Ala Lys Arg Val His Ala Thr Thr
100 105 110
Met Thr Ser Leu Gln Thr Trp Ile Val Leu Ile Gly Ser His Ser Val
115 120 125
Val Phe Met Ser Ile Leu Arg Leu Trp Thr Ile Gln Leu Phe Ile His
130 135 140
Val Leu Ser Tyr Lys His Ile Leu Leu Ala Ser Phe Val Tyr Cys Ile
145 150 155 160
His Phe Cys Leu Ser Phe Thr His Val Gln Ala Met Ile Ser Cys Asn
165 170 175
Ser Ala Thr Trp Ser Leu Arg Val Leu Glu Gln Gln Ile Pro Glu Asn
180 185 190
Ser Leu Leu Asp Thr Leu Leu Arg Tyr Gly Lys Pro Ile Gly Ala Asn
195 200 205
Leu Tyr Leu Ser Leu Ile Ala Met Glu Met Leu Val Phe Ser Leu Gly
210 215 220
Thr Met Met Ala Ile Gly Asn Ser Phe Tyr Met Leu Val Ser Asp Ile
225 230 235 240

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Val Phe Gly Ser Ile Asn Leu Phe Phe Val Leu Thr Ile Ala Trp Tyr
      245                      250                      255
Ile Asn Thr Glu Leu Phe Leu Val Lys Tyr Leu Lys His Gln Ile Gly
      260                      265                      270
Phe Tyr Val Gly Val Phe Val Ser Tyr Leu Ile Leu Leu Leu Pro Val
      275                      280                      285
Val Arg Tyr Asp Lys Val Phe Ile Ser Ala Ser Leu His Lys Val Ile
      290                      295                      300
Ala Val Asn Ile Ser Met Ile Pro Ile Thr Cys Ile Leu Ala Ile Ile
      305                      310                      315                      320
Leu Arg Ile Ile Arg Asn Asp Trp Lys Trp Cys Ala Lys Ser Pro Glu
      325                      330                      335
Tyr Ala Pro Leu Pro Gln Gly Pro Lys Glu Lys Thr Thr Lys Val Lys
      340                      345                      350
Tyr Ser Pro Glu Leu Asn Ala Leu Tyr Glu Thr Glu Glu Asp Val Ser
      355                      360                      365
Asp Tyr Glu Asp Ala Tyr Pro Lys Tyr Ile
      370                      375

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<210> 76
<211> 1407
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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<220>
<221> CDS
<222> (1)..(1407)

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<400> 76
atg aac gcc cgg gag gtg gca ctc acg gga cat gtt ttg cac ata tcg 48
Met Asn Ala Arg Glu Val Ala Leu Thr Gly His Val Leu His Ile Ser
  1                      5                      10                      15

ctg cat agc acg cac gag cgc gag aaa tta ata atc tgg cag gtt cat 96
Leu His Ser Thr His Glu Arg Glu Lys Leu Ile Ile Trp Gln Val His
      20                      25                      30

tta ctt gta tgt caa caa tgc gga att cag gga gat gcc gca tat cta 144
Leu Leu Val Cys Gln Gln Cys Gly Ile Gln Gly Asp Ala Ala Tyr Leu
      35                      40                      45

ttt gtc acc gaa aca tta agc aat act gac tgg gga aat ata ccg gcg 192
Phe Val Thr Glu Thr Leu Ser Asn Thr Asp Trp Gly Asn Ile Pro Ala
      50                      55                      60

ata aac cgt cac gca ccg tcc ata aat gag cac ggc cgt aat tat atg 240
Ile Asn Arg His Ala Pro Ser Ile Asn Glu His Gly Arg Asn Tyr Met
      65                      70                      75                      80

cag tgg gaa ctc cgt act cgt tta cgg aat ccc atc att caa ttg tta 288
Gln Trp Glu Leu Arg Thr Arg Leu Arg Asn Pro Ile Ile Gln Leu Leu
      85                      90                      95

agt cgc cag ccc ggt gcg gtt aac gta agg gtc agc gag ccg aat atg 336
Ser Arg Gln Pro Gly Ala Val Asn Val Arg Val Ser Glu Pro Asn Met
      100                     105                     110

gta ata gtg ggc tgc gaa cga gcg ttg gat cac tcg tgt tcg gtg cgc 384
Val Ile Val Gly Cys Glu Arg Ala Leu Asp His Ser Cys Ser Val Arg

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115										120										125																				
gtg	act	gga	gcc	tat	ctt	cat	tgc	gat	acc	act	atg	gac	ttt	agt	ttg	432																								
Val	Thr	Gly	Ala	Tyr	Leu	His	Cys	Asp	Thr	Thr	Met	Asp	Phe	Ser	Leu																									
130										135										140																				
gat	tct	gtt	gtg	tcc	cca	acc	cgc	gaa	ttt	tgg	ttc	tca	gag	atg	ttt	480																								
Asp	Ser	Val	Val	Ser	Pro	Thr	Arg	Glu	Phe	Trp	Phe	Ser	Glu	Met	Phe																									
145										155										160																				
tct	cac	tgt	tta	gtt	tcc	aac	att	gaa	gtt	tac	ctt	aaa	aca	acg	ggc	528																								
Ser	His	Cys	Leu	Val	Ser	Asn	Ile	Glu	Val	Tyr	Leu	Lys	Thr	Thr	Gly																									
165										170										175																				
ggg	tta	tac	tat	agg	gca	tcg	agt	gcc	acg	caa	tgc	cga	aaa	agg	gcg	576																								
Gly	Leu	Tyr	Tyr	Arg	Ala	Ser	Ser	Ala	Thr	Gln	Cys	Arg	Lys	Arg	Ala																									
180										185										190																				
aaa	gat	ggc	gca	ttg	ggt	att	ctt	gat	atc	ttt	aat	tgc	gaa	tct	cgt	624																								
Lys	Asp	Gly	Ala	Leu	Gly	Ile	Leu	Asp	Ile	Phe	Asn	Cys	Glu	Ser	Arg																									
195										200										205																				
gaa	ata	caa	gtt	gcc	ggg	cag	aag	tac	acc	ttg	agt	atc	gcc	acc	gca	672																								
Glu	Ile	Gln	Val	Ala	Gly	Gln	Lys	Tyr	Thr	Leu	Ser	Ile	Ala	Thr	Ala																									
210										215										220																				
aca	ttt	cac	gtt	ctc	tgg	gtg	gac	gag	gcg	tgt	atg	tgg	aac	ggg	gcc	720																								
Thr	Phe	His	Val	Leu	Trp	Val	Asp	Glu	Ala	Cys	Met	Trp	Asn	Gly	Ala																									
225										230										235										240										
ctg	gcc	gaa	ttt	ttt	agg	gcg	ctg	cac	aat	aag	ttg	ttc	ggc	gac	cgg	768																								
Leu	Ala	Glu	Phe	Phe	Arg	Ala	Leu	His	Asn	Lys	Leu	Phe	Gly	Asp	Arg																									
245										250										255																				
gaa	ggc	gta	gcg	cca	acg	tta	acg	tac	gtg	tgt	ccg	ggg	gcc	act	ccg	816																								
Glu	Gly	Val	Ala	Pro	Thr	Leu	Thr	Tyr	Val	Cys	Pro	Gly	Ala	Thr	Pro																									
260										265										270																				
gag	gga	acc	ccc	ttc	ccc	ccc	tac	ttt	tcc	gcg	ttt	cca	cac	ctc	ccg	864																								
Glu	Gly	Thr	Pro	Phe	Pro	Pro	Tyr	Phe	Ser	Ala	Phe	Pro	His	Leu	Pro																									
275										280										285																				
ctc	gtg	ttt	gga	aga	ccg	cga	agg	ctc	gac	gta	acc	gcg	gtc	caa	gaa	912																								
Leu	Val	Phe	Gly	Arg	Pro	Arg	Arg	Leu	Asp	Val	Thr	Ala	Val	Gln	Glu																									
290										295										300																				
ctc	cca	aaa	gca	caa	att	gcg	gta	cac	tgg	ccc	ccg	ttt	aaa	gat	tca	960																								
Leu	Pro	Lys	Ala	Gln	Ile	Ala	Val	His	Trp	Pro	Pro	Phe	Lys	Asp	Ser																									
305										310										315										320										
atc	tta	ggg	gat	cag	ctt	ctc	ata	cct	ggc	att	tca	cct	aaa	aag	cca	1008																								
Ile	Leu	Gly	Asp	Gln	Leu	Leu	Ile	Pro	Gly	Ile	Ser	Pro	Lys	Lys	Pro																									
325										330										335																				
ggt	acc	gta	ccc	gtt	cgt	tgg	ccg	ctt	tgg	gtg	gag	gat	gtt	aac	ttg	1056																								
Gly	Thr	Val	Pro	Val	Arg	Trp	Pro	Leu	Trp	Val	Glu	Asp	Val	Asn	Leu																									
340										345										350																				
agt	ctc	tgc	gag	acg	aca	gaa	agc	gtt	gcc	cgc	ata	gtc	gac	cca	cat	1104																								
Ser	Leu	Cys	Glu	Thr	Thr	Glu	Ser	Val	Ala	Arg	Ile	Val	Asp	Pro	His																									
355										360										365																				

tct ata gta atc ata aaa ttt tca tca ctg ttg tgc cag cac cta aaa 1152  
 Ser Ile Val Ile Ile Lys Phe Ser Ser Leu Leu Cys Gln His Leu Lys  
 370 375 380

tgc cac cgt gcg ttt gtt aaa aat gag tta gaa tac ata gca acc atc 1200  
 Cys His Arg Ala Phe Val Lys Asn Glu Leu Glu Tyr Ile Ala Thr Ile  
 385 390 395 400

tgt tcc agc gac ctt cgc ctc ttc atc caa gag gaa tac aac cgg tta 1248  
 Cys Ser Ser Asp Leu Arg Leu Phe Ile Gln Glu Glu Tyr Asn Arg Leu  
 405 410 415

ctt gcc acc att ttt acg tgg gcc gcg gcg agc ggg tat acc tgg gcg 1296  
 Leu Ala Thr Ile Phe Thr Trp Ala Ala Ala Ser Gly Tyr Thr Trp Ala  
 420 425 430

gcc att gat aaa aca aca gta ttc atc aag gct ccc cag ctc agc gca 1344  
 Ala Ile Asp Lys Thr Thr Val Phe Ile Lys Ala Pro Gln Leu Ser Ala  
 435 440 445

gct gta agt ggt ttc tgc cca tca cta aat agt tgc cgt agg aaa caa 1392  
 Ala Val Ser Gly Phe Cys Pro Ser Leu Asn Ser Cys Arg Arg Lys Gln  
 450 455 460

tgt tac gaa ggt taa 1407  
 Cys Tyr Glu Gly  
 465

<210> 77

<211> 468

<212> PRT

<213> Macaca mulatta rhadinovirus 17577

<400> 77

Met Asn Ala Arg Glu Val Ala Leu Thr Gly His Val Leu His Ile Ser  
 1 5 10 15  
 Leu His Ser Thr His Glu Arg Glu Lys Leu Ile Ile Trp Gln Val His  
 20 25 30  
 Leu Leu Val Cys Gln Gln Cys Gly Ile Gln Gly Asp Ala Ala Tyr Leu  
 35 40 45  
 Phe Val Thr Glu Thr Leu Ser Asn Thr Asp Trp Gly Asn Ile Pro Ala  
 50 55 60  
 Ile Asn Arg His Ala Pro Ser Ile Asn Glu His Gly Arg Asn Tyr Met  
 65 70 75 80  
 Gln Trp Glu Leu Arg Thr Arg Leu Arg Asn Pro Ile Ile Gln Leu Leu  
 85 90 95  
 Ser Arg Gln Pro Gly Ala Val Asn Val Arg Val Ser Glu Pro Asn Met  
 100 105 110  
 Val Ile Val Gly Cys Glu Arg Ala Leu Asp His Ser Cys Ser Val Arg  
 115 120 125  
 Val Thr Gly Ala Tyr Leu His Cys Asp Thr Thr Met Asp Phe Ser Leu  
 130 135 140  
 Asp Ser Val Val Ser Pro Thr Arg Glu Phe Trp Phe Ser Glu Met Phe  
 145 150 155 160  
 Ser His Cys Leu Val Ser Asn Ile Glu Val Tyr Leu Lys Thr Thr Gly  
 165 170 175  
 Gly Leu Tyr Tyr Arg Ala Ser Ser Ala Thr Gln Cys Arg Lys Arg Ala  
 180 185 190  
 Lys Asp Gly Ala Leu Gly Ile Leu Asp Ile Phe Asn Cys Glu Ser Arg

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      195              200              205
Glu Ile Gln Val Ala Gly Gln Lys Tyr Thr Leu Ser Ile Ala Thr Ala
      210              215              220
Thr Phe His Val Leu Trp Val Asp Glu Ala Cys Met Trp Asn Gly Ala
225              230              235              240
Leu Ala Glu Phe Phe Arg Ala Leu His Asn Lys Leu Phe Gly Asp Arg
      245              250              255
Glu Gly Val Ala Pro Thr Leu Thr Tyr Val Cys Pro Gly Ala Thr Pro
      260              265              270
Glu Gly Thr Pro Phe Pro Pro Tyr Phe Ser Ala Phe Pro His Leu Pro
      275              280              285
Leu Val Phe Gly Arg Pro Arg Arg Leu Asp Val Thr Ala Val Gln Glu
      290              295              300
Leu Pro Lys Ala Gln Ile Ala Val His Trp Pro Pro Phe Lys Asp Ser
305              310              315              320
Ile Leu Gly Asp Gln Leu Leu Ile Pro Gly Ile Ser Pro Lys Lys Pro
      325              330              335
Gly Thr Val Pro Val Arg Trp Pro Leu Trp Val Glu Asp Val Asn Leu
      340              345              350
Ser Leu Cys Glu Thr Thr Glu Ser Val Ala Arg Ile Val Asp Pro His
      355              360              365
Ser Ile Val Ile Ile Lys Phe Ser Ser Leu Leu Cys Gln His Leu Lys
      370              375              380
Cys His Arg Ala Phe Val Lys Asn Glu Leu Glu Tyr Ile Ala Thr Ile
385              390              395              400
Cys Ser Ser Asp Leu Arg Leu Phe Ile Gln Glu Glu Tyr Asn Arg Leu
      405              410              415
Leu Ala Thr Ile Phe Thr Trp Ala Ala Ala Ser Gly Tyr Thr Trp Ala
      420              425              430
Ala Ile Asp Lys Thr Thr Val Phe Ile Lys Ala Pro Gln Leu Ser Ala
      435              440              445
Ala Val Ser Gly Phe Cys Pro Ser Leu Asn Ser Cys Arg Arg Lys Gln
      450              455              460
Cys Tyr Glu Gly
465

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<210> 78
<211> 612
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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<220>
<221> CDS
<222> (1)..(612)

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<400> 78
atg tta cga agg tta aaa ata aca gtt cat ttc ctt tca cag gaa cag 48
Met Leu Arg Arg Leu Lys Ile Thr Val His Phe Leu Ser Gln Glu Gln
      1              5              10              15

caa aag gtc gtg acc cgt ctt gag gcg cat ttg gga ctt ccc gta cag 96
Gln Lys Val Val Thr Arg Leu Glu Ala His Leu Gly Leu Pro Val Gln
      20              25              30

gaa act tcc cac ccg cct gac tgg ctc aag tgt gag gtc tgc tcc gcg 144
Glu Thr Ser His Pro Pro Asp Trp Leu Lys Cys Glu Val Cys Ser Ala
      35              40              45

tcc gtg ttt tta aaa ata cca gcc ggg gtt ttg tat gcc gga ctc gca 192

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Ser Val Phe Leu Lys Ile Pro Ala Gly Val Leu Tyr Ala Gly Leu Ala
  50                      55                      60

aga gac ccc acc agg gaa gca aaa cgg gac tcg tgg ctg gac tgt cta 240
Arg Asp Pro Thr Arg Glu Ala Lys Arg Asp Ser Trp Leu Asp Cys Leu
  65                      70                      75                      80

gta gaa ggc gcg acg ttg ttg ctt aac aac tca gtg tta ccg att ggg 288
Val Glu Gly Ala Thr Leu Leu Asn Asn Ser Val Leu Pro Ile Gly
                      85                      90                      95

gcg ctg gcg ggt atc tta ccc acc ctt ttt gcc aac agg cgg tgt gtt 336
Ala Leu Ala Gly Ile Leu Pro Thr Leu Phe Ala Asn Arg Arg Cys Val
                      100                      105                      110

aat ttt tgg ctg ctg cca cgc gcg tgg gta aaa tcg gcg ccc ata tgc 384
Asn Phe Trp Leu Leu Pro Arg Ala Trp Val Lys Ser Ala Pro Ile Cys
                      115                      120                      125

cct ccc cta ccg att gac tgt gtt acg cct cca cag ttt gtc gtg aca 432
Pro Pro Leu Pro Ile Asp Cys Val Thr Pro Pro Gln Phe Val Val Thr
                      130                      135                      140

aag cgt gga cca atc tgc tgg tac aag gaa tgg ccg tta ccg gtt gac 480
Lys Arg Gly Pro Ile Cys Trp Tyr Lys Glu Trp Pro Leu Pro Val Asp
145                      150                      155                      160

gtt gat ttt atg tac tac cta cag gag gca cta tgt gtt ttt agt gtt 528
Val Asp Phe Met Tyr Tyr Leu Gln Glu Ala Leu Cys Val Phe Ser Val
                      165                      170                      175

gtg tcc aac ggg gag ggt acg gag agt cac gcg gac aat ata cga caa 576
Val Ser Asn Gly Glu Gly Thr Glu Ser His Ala Asp Asn Ile Arg Gln
                      180                      185                      190

tta gag aag ttt gaa aag gta cta tgt tta ttt taa 612
Leu Glu Lys Phe Glu Lys Val Leu Cys Leu Phe
                      195                      200

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<210> 79
<211> 203
<212> PRT
<213> Macaca mulatta rhadinovirus 17577

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<400> 79
Met Leu Arg Arg Leu Lys Ile Thr Val His Phe Leu Ser Gln Glu Gln
  1                      5                      10                      15
Gln Lys Val Val Thr Arg Leu Glu Ala His Leu Gly Leu Pro Val Gln
                      20                      25                      30
Glu Thr Ser His Pro Pro Asp Trp Leu Lys Cys Glu Val Cys Ser Ala
                      35                      40                      45
Ser Val Phe Leu Lys Ile Pro Ala Gly Val Leu Tyr Ala Gly Leu Ala
  50                      55                      60
Arg Asp Pro Thr Arg Glu Ala Lys Arg Asp Ser Trp Leu Asp Cys Leu
  65                      70                      75                      80
Val Glu Gly Ala Thr Leu Leu Leu Asn Asn Ser Val Leu Pro Ile Gly
                      85                      90                      95
Ala Leu Ala Gly Ile Leu Pro Thr Leu Phe Ala Asn Arg Arg Cys Val
                      100                      105                      110
Asn Phe Trp Leu Leu Pro Arg Ala Trp Val Lys Ser Ala Pro Ile Cys

```

115					120					125					
Pro	Pro	Leu	Pro	Ile	Asp	Cys	Val	Thr	Pro	Pro	Gln	Phe	Val	Val	Thr
130					135					140					
Lys	Arg	Gly	Pro	Ile	Cys	Trp	Tyr	Lys	Glu	Trp	Pro	Leu	Pro	Val	Asp
145					150					155					
Val	Asp	Phe	Met	Tyr	Tyr	Leu	Gln	Glu	Ala	Leu	Cys	Val	Phe	Ser	Val
165					170					175					
Val	Ser	Asn	Gly	Glu	Gly	Thr	Glu	Ser	His	Ala	Asp	Asn	Ile	Arg	Gln
180					185					190					
Leu	Glu	Lys	Phe	Glu	Lys	Val	Leu	Cys	Leu	Phe					
195					200										

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<210> 80
<211> 819
<212> DNA
<213> Macaca mulatta rhadinovirus 17577
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<220>  
<221> CDS  
<222> (1)..(819)
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<400> 80																
atg	gac	caa	ata	ctg	aag	cgt	cta	atg	ggg	gag	cag	cac	cga	tct	gag	48
Met	Asp	Gln	Ile	Leu	Lys	Arg	Leu	Met	Gly	Glu	Gln	His	Arg	Ser	Glu	
1		5				10				15						
gcg	gta	atg	cct	gaa	aca	gaa	tgc	tgc	tcc	aga	ggg	ccc	tat	aat	tat	96
Ala	Val	Met	Pro	Glu	Thr	Glu	Cys	Ser	Ser	Arg	Gly	Pro	Tyr	Asn	Tyr	
			20		25				30							
cca	gtt	ttt	cgc	cga	ctg	atg	ttg	gaa	gta	cat	aaa	aaa	aat	agc	att	144
Pro	Val	Phe	Pro	Arg	Leu	Met	Leu	Glu	Val	His	Lys	Lys	Asn	Ser	Ile	
			35		40				45							
tgc	atg	gct	tcc	aat	acg	cct	aag	ctg	tgt	gtt	cga	gga	cga	cta	aac	192
Cys	Met	Ala	Ser	Asn	Thr	Pro	Lys	Leu	Cys	Val	Arg	Gly	Arg	Leu	Asn	
50		55				60										
gtt	cct	gat	tta	ggc	gtg	cac	gtg	cgc	acc	agg	ctt	cag	tcg	gca	acg	240
Val	Pro	Asp	Leu	Gly	Val	His	Val	Arg	Thr	Arg	Leu	Gln	Ser	Ala	Thr	
65		70				75				80						
ttt	act	ggg	ttt	gtc	ttt	gcg	tgc	gtg	gtc	gaa	cac	gag	gac	atg	atc	288
Phe	Thr	Gly	Phe	Val	Phe	Ala	Cys	Val	Val	Glu	His	Glu	Asp	Met	Ile	
				85		90				95						
gac	gca	ctg	gac	ata	tat	ccg	cac	gtt	ttt	tct	gac	cgc	gtg	cag	ctg	336
Asp	Ala	Leu	Asp	Ile	Tyr	Pro	His	Val	Phe	Ser	Asp	Arg	Val	Gln	Leu	
			100		105				110							
ttt	aag	ccg	gcg	agc	gcg	agc	gta	aca	gaa	ctc	tgc	tgc	att	ctt	tct	384
Phe	Lys	Pro	Ala	Ser	Ala	Ser	Val	Thr	Glu	Leu	Cys	Cys	Ile	Leu	Ser	
115		120				125										
atg	ctg	gaa	aac	tac	gat	aag	ccc	ccc	cta	tca	ttt	atc	ctg	tcc	gcg	432
Met	Leu	Glu	Asn	Tyr	Asp	Lys	Pro	Pro	Leu	Ser	Phe	Ile	Leu	Ser	Ala	
130		135				140										
ctt	qac	cqq	qcc	agg	tac	cta	cac	gag	agg	tat	acg	tgt	aat	gat	tcc	480

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Leu Asp Arg Ala Arg Tyr Leu His Glu Arg Tyr Thr Cys Asn Asp Ser
145                      150                      155                      160

gcg ttt gta ttg tat ggg atc gaa gtg ata gcg tcg acc ttg gcg gca 528
Ala Phe Val Leu Tyr Gly Ile Glu Val Ile Ala Ser Thr Leu Ala Ala
                      165                      170                      175

tac cac gag tta aac cca ccc caa ggc att ttg cgc gtt ccg ccc cta 576
Tyr His Glu Leu Asn Pro Pro Gln Gly Ile Leu Arg Val Pro Pro Leu
                      180                      185                      190

gtg cgg ttc aaa ctc cat aag ctg ttg gac gaa aac gca gac gac atg 624
Val Arg Phe Lys Leu His Lys Leu Leu Asp Glu Asn Ala Asp Asp Met
                      195                      200                      205

aaa ggc tta ctg aaa ccc att tat ttg gaa tcc ttt cgt cta aca gag 672
Lys Gly Leu Leu Lys Pro Ile Tyr Leu Glu Ser Phe Arg Leu Thr Glu
                      210                      215                      220

aac gtt gga gaa gaa gag ggc cac gcg gag act ttt aac ata ttt tat 720
Asn Val Gly Glu Glu Glu Gly His Ala Glu Thr Phe Asn Ile Phe Tyr
225                      230                      235                      240

tgc ggc aca att ttt acc aga cac ctt cat aac gca tcg gta tta aaa 768
Cys Gly Thr Ile Phe Thr Arg His Leu His Asn Ala Ser Val Leu Lys
                      245                      250                      255

tat ttt caa ata acc agc cta cac agc atc ccc aga cag act ctg ttt 816
Tyr Phe Gln Ile Thr Ser Leu His Ser Ile Pro Arg Gln Thr Leu Phe
                      260                      265                      270

taa 819

```

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<210> 81
<211> 272
<212> PRT
<213> Macaca mulatta rhadinovirus 17577

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```

<400> 81
Met Asp Gln Ile Leu Lys Arg Leu Met Gly Glu Gln His Arg Ser Glu
1      5      10      15
Ala Val Met Pro Glu Thr Glu Cys Ser Ser Arg Gly Pro Tyr Asn Tyr
20     25     30
Pro Val Phe Pro Arg Leu Met Leu Glu Val His Lys Lys Asn Ser Ile
35     40     45
Cys Met Ala Ser Asn Thr Pro Lys Leu Cys Val Arg Gly Arg Leu Asn
50     55     60
Val Pro Asp Leu Gly Val His Val Arg Thr Arg Leu Gln Ser Ala Thr
65     70     75     80
Phe Thr Gly Phe Val Phe Ala Cys Val Val Glu His Glu Asp Met Ile
85     90     95
Asp Ala Leu Asp Ile Tyr Pro His Val Phe Ser Asp Arg Val Gln Leu
100    105    110
Phe Lys Pro Ala Ser Ala Ser Val Thr Glu Leu Cys Cys Ile Leu Ser
115    120    125
Met Leu Glu Asn Tyr Asp Lys Pro Pro Leu Ser Phe Ile Leu Ser Ala
130    135    140
Leu Asp Arg Ala Arg Tyr Leu His Glu Arg Tyr Thr Cys Asn Asp Ser
145    150    155    160

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Ala Phe Val Leu Tyr Gly Ile Glu Val Ile Ala Ser Thr Leu Ala Ala
      165                      170                      175
Tyr His Glu Leu Asn Pro Pro Gln Gly Ile Leu Arg Val Pro Pro Leu
      180                      185                      190
Val Arg Phe Lys Leu His Lys Leu Leu Asp Glu Asn Ala Asp Asp Met
      195                      200                      205
Lys Gly Leu Leu Lys Pro Ile Tyr Leu Glu Ser Phe Arg Leu Thr Glu
      210                      215                      220
Asn Val Gly Glu Glu Glu Gly His Ala Glu Thr Phe Asn Ile Phe Tyr
      225                      230                      235                      240
Cys Gly Thr Ile Phe Thr Arg His Leu His Asn Ala Ser Val Leu Lys
      245                      250                      255
Tyr Phe Gln Ile Thr Ser Leu His Ser Ile Pro Arg Gln Thr Leu Phe
      260                      265                      270

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<210> 82
<211> 1731
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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<220>
<221> CDS
<222> (1)..(1731)

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<400> 82
atg ttc aag atg aac ccc gga ttt ggt tcg acg tgt ttg gtc cat ccg 48
Met Phe Lys Met Asn Pro Gly Phe Gly Ser Thr Cys Leu Val His Pro
  1                      5                      10                      15

acg gaa ctc tcc atc tcg ctt ttc gag atc cta cag ggc aag tac gcg 96
Thr Glu Leu Ser Ile Ser Leu Phe Glu Ile Leu Gln Gly Lys Tyr Ala
      20                      25                      30

tac gtt cgc ggt caa acg cta cac tcc agt ctt cga aat cca ggg atc 144
Tyr Val Arg Gly Gln Thr Leu His Ser Ser Leu Arg Asn Pro Gly Ile
      35                      40                      45

ttt gga aga cag ctg ttc ata cac ctg tac aag acg gca ttg ggg agc 192
Phe Gly Arg Gln Leu Phe Ile His Leu Tyr Lys Thr Ala Leu Gly Ser
      50                      55                      60

tgc aca tac gac aac gtc tta aag gac tgg acc aac ttc gag acc acc 240
Cys Thr Tyr Asp Asn Val Leu Lys Asp Trp Thr Asn Phe Glu Thr Thr
      65                      70                      75                      80

ctg aag acc cgt tgg cgc ggt gtc gag cac ctg acg ccg gaa ttc aaa 288
Leu Lys Thr Arg Trp Arg Gly Val Glu His Leu Thr Pro Glu Phe Lys
      85                      90                      95

cgg tct acg ttt gaa tcg tgg gca cgt acc gtt cgt cta aca gtc gat 336
Arg Ser Thr Phe Glu Ser Trp Ala Arg Thr Val Arg Leu Thr Val Asp
      100                      105                      110

caa ctg tta ctg aac act att aat cag gta cta cac acc agg act gtt 384
Gln Leu Leu Leu Asn Thr Ile Asn Gln Val Leu His Thr Arg Thr Val
      115                      120                      125

tta tcg tac gaa cga tac gtc gac tgg gtg gtc gcc ctt ggg ttg gtg 432
Leu Ser Tyr Glu Arg Tyr Val Asp Trp Val Val Ala Leu Gly Leu Val

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130	135	140	
cct att gtc agg cgc acc	ccc gac ggc gac acg atc gcc agg ata caa	480	
Pro Ile Val Arg Arg Thr	Pro Asp Gly Asp Thr Ile Ala Arg Ile Gln		
145	150 155 160		
gca cac tgt caa cag atg agg aaa acg tac gct tcc gga gac gtt acg	528		
Ala His Cys Gln Gln Met Arg Lys Thr Tyr Ala Ser Gly Asp Val Thr			
165 170 175			
ata tcg cgg att gtc gac aaa ctg gca cag gag att acc tcg ata atg	576		
Ile Ser Arg Ile Val Asp Lys Leu Ala Gln Glu Ile Thr Ser Ile Met			
180 185 190			
acc gat gtg acg tct att tat att cca gac tac gcc gag gtg tct gtg	624		
Thr Asp Val Thr Ser Ile Tyr Ile Pro Asp Tyr Ala Glu Val Ser Val			
195 200 205			
gag ttt aac gga gat aag gct gct tat ctc ggc acc tac aga caa aaa	672		
Glu Phe Asn Gly Asp Lys Ala Ala Tyr Leu Gly Thr Tyr Arg Gln Lys			
210 215 220			
gat ata aca gtt gaa gtt gtt tca cgg cct ata att tac aat gga cgc	720		
Asp Ile Thr Val Glu Val Val Ser Arg Pro Ile Ile Tyr Asn Gly Arg			
225 230 235 240			
gtc gcc ttt gat agc cct ctg tac cgg tta ttt acc gcg att atg aca	768		
Val Ala Phe Asp Ser Pro Leu Tyr Arg Leu Phe Thr Ala Ile Met Thr			
245 250 255			
tgt cac agg acc gcg gag cac gca aag tta tgt cag tta cta aat acc	816		
Cys His Arg Thr Ala Glu His Ala Lys Leu Cys Gln Leu Leu Asn Thr			
260 265 270			
gcg cct cta aaa gcg ctg gtc ggt agc acg tgc aac gac atg tat aaa	864		
Ala Pro Leu Lys Ala Leu Val Gly Ser Thr Cys Asn Asp Met Tyr Lys			
275 280 285			
gac ata ttg gct cgc tta gag caa tcg tct caa aaa acc gac ccc aag	912		
Asp Ile Leu Ala Arg Leu Glu Gln Ser Ser Gln Lys Thr Asp Pro Lys			
290 295 300			
agg gag ctc cta aac ttg ctg ata aag ctc gcg gag aac aaa aca gtg	960		
Arg Glu Leu Leu Asn Leu Leu Ile Lys Leu Ala Glu Asn Lys Thr Val			
305 310 315 320			
agc ggc ata aca gac gtt gtt gag gat ttc gtc aca gac gtc tct caa	1008		
Ser Gly Ile Thr Asp Val Val Glu Asp Phe Val Thr Asp Val Ser Gln			
325 330 335			
aac att gtg gac aaa aac aag ctc ttt ggg acc ggt acg gaa agt acg	1056		
Asn Ile Val Asp Lys Asn Lys Leu Phe Gly Thr Gly Thr Glu Ser Thr			
340 345 350			
acc cag ggt ctc cgg aaa cag gtt tca aat acc gtg ttc aaa tgc ctg	1104		
Thr Gln Gly Leu Arg Lys Gln Val Ser Asn Thr Val Phe Lys Cys Leu			
355 360 365			
acg aac cag atc aac gag cag ttc gat aca att tct aac ctt gag aaa	1152		
Thr Asn Gln Ile Asn Glu Gln Phe Asp Thr Ile Ser Asn Leu Glu Lys			
370 375 380			

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gaa cga gac gac tac gta aag aag att caa tgc att gaa acg cag ttg 1200
Glu Arg Asp Asp Tyr Val Lys Lys Ile Gln Cys Ile Glu Thr Gln Leu
385 390 395 400

ctt cag agt tta cca gag gga ggc agg ccc aga cac gat att aat ata 1248
Leu Gln Ser Leu Pro Glu Gly Gly Arg Pro Arg His Asp Ile Asn Ile
405 410 415

ctc act cag aat acg ttg cag gct tta tcc ggt ctg cgc gac cca acc 1296
Leu Thr Gln Asn Thr Leu Gln Ala Leu Ser Gly Leu Arg Asp Pro Thr
420 425 430

att aac cta tcc gaa tgt cac atc cct aaa ggc agc tcc gta gta aac 1344
Ile Asn Leu Ser Glu Cys His Ile Pro Lys Gly Ser Ser Val Val Asn
435 440 445

agc ttt ttt tca caa tac gtc cct ccg ttt atg gag atg ctc aaa gag 1392
Ser Phe Phe Ser Gln Tyr Val Pro Pro Phe Met Glu Met Leu Lys Glu
450 455 460

cta act agc ctg tgg gaa ggg gaa atg ttt caa acg tac aac ctc aca 1440
Leu Thr Ser Leu Trp Glu Gly Glu Met Phe Gln Thr Tyr Asn Leu Thr
465 470 475 480

ccc gtg gtc gac aat cag ggg cag cga acg agc atc gcc tac tcg cag 1488
Pro Val Val Asp Asn Gln Gly Gln Arg Thr Ser Ile Ala Tyr Ser Gln
485 490 495

gac acg gtt tcc att ctc tta ggc ccg ttt acg tac ata atc gcc aaa 1536
Asp Thr Val Ser Ile Leu Leu Gly Pro Phe Thr Tyr Ile Ile Ala Lys
500 505 510

ctg act cac atg gac ctc ata aat cac tct ctc att tcc tta agt tta 1584
Leu Thr His Met Asp Leu Ile Asn His Ser Leu Ile Ser Leu Ser Leu
515 520 525

cac gat att gca gac cag ctg tat gtg gac agc agg ctg tct gtg tat 1632
His Asp Ile Ala Asp Gln Leu Tyr Val Asp Ser Arg Leu Ser Val Tyr
530 535 540

ata aat gac ata ggc cac aaa tat tgc gaa caa att agc cag cct gga 1680
Ile Asn Asp Ile Gly His Lys Tyr Cys Glu Gln Ile Ser Gln Pro Gly
545 550 555 560

acc gat gga cca aat act gaa gcg tct aat ggg gga gca gca ccg atc 1728
Thr Asp Gly Pro Asn Thr Glu Ala Ser Asn Gly Gly Ala Ala Pro Ile
565 570 575

tga 1731

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<210> 83
<211> 576
<212> PRT
<213> Macaca mulatta rhadinovirus 17577

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<400> 83
Met Phe Lys Met Asn Pro Gly Phe Gly Ser Thr Cys Leu Val His Pro
1 5 10 15

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Thr Glu Leu Ser Ile Ser Leu Phe Glu Ile Leu Gln Gly Lys Tyr Ala  
                   20                  25                  30  
 Tyr Val Arg Gly Gln Thr Leu His Ser Ser Leu Arg Asn Pro Gly Ile  
                   35                  40                  45  
 Phe Gly Arg Gln Leu Phe Ile His Leu Tyr Lys Thr Ala Leu Gly Ser  
                   50                  55                  60  
 Cys Thr Tyr Asp Asn Val Leu Lys Asp Trp Thr Asn Phe Glu Thr Thr  
                   65                  70                  75                  80  
 Leu Lys Thr Arg Trp Arg Gly Val Glu His Leu Thr Pro Glu Phe Lys  
                   85                  90                  95  
 Arg Ser Thr Phe Glu Ser Trp Ala Arg Thr Val Arg Leu Thr Val Asp  
                   100                  105                  110  
 Gln Leu Leu Leu Asn Thr Ile Asn Gln Val Leu His Thr Arg Thr Val  
                   115                  120                  125  
 Leu Ser Tyr Glu Arg Tyr Val Asp Trp Val Val Ala Leu Gly Leu Val  
                   130                  135                  140  
 Pro Ile Val Arg Arg Thr Pro Asp Gly Asp Thr Ile Ala Arg Ile Gln  
                   145                  150                  155                  160  
 Ala His Cys Gln Gln Met Arg Lys Thr Tyr Ala Ser Gly Asp Val Thr  
                   165                  170                  175  
 Ile Ser Arg Ile Val Asp Lys Leu Ala Gln Glu Ile Thr Ser Ile Met  
                   180                  185                  190  
 Thr Asp Val Thr Ser Ile Tyr Ile Pro Asp Tyr Ala Glu Val Ser Val  
                   195                  200                  205  
 Glu Phe Asn Gly Asp Lys Ala Ala Tyr Leu Gly Thr Tyr Arg Gln Lys  
                   210                  215                  220  
 Asp Ile Thr Val Glu Val Val Ser Arg Pro Ile Ile Tyr Asn Gly Arg  
                   225                  230                  235                  240  
 Val Ala Phe Asp Ser Pro Leu Tyr Arg Leu Phe Thr Ala Ile Met Thr  
                   245                  250                  255  
 Cys His Arg Thr Ala Glu His Ala Lys Leu Cys Gln Leu Leu Asn Thr  
                   260                  265                  270  
 Ala Pro Leu Lys Ala Leu Val Gly Ser Thr Cys Asn Asp Met Tyr Lys  
                   275                  280                  285  
 Asp Ile Leu Ala Arg Leu Glu Gln Ser Ser Gln Lys Thr Asp Pro Lys  
                   290                  295                  300  
 Arg Glu Leu Leu Asn Leu Leu Ile Lys Leu Ala Glu Asn Lys Thr Val  
                   305                  310                  315                  320  
 Ser Gly Ile Thr Asp Val Val Glu Asp Phe Val Thr Asp Val Ser Gln  
                   325                  330                  335  
 Asn Ile Val Asp Lys Asn Lys Leu Phe Gly Thr Gly Thr Glu Ser Thr  
                   340                  345                  350  
 Thr Gln Gly Leu Arg Lys Gln Val Ser Asn Thr Val Phe Lys Cys Leu  
                   355                  360                  365  
 Thr Asn Gln Ile Asn Glu Gln Phe Asp Thr Ile Ser Asn Leu Glu Lys  
                   370                  375                  380  
 Glu Arg Asp Asp Tyr Val Lys Lys Ile Gln Cys Ile Glu Thr Gln Leu  
                   385                  390                  395                  400  
 Leu Gln Ser Leu Pro Glu Gly Gly Arg Pro Arg His Asp Ile Asn Ile  
                   405                  410                  415  
 Leu Thr Gln Asn Thr Leu Gln Ala Leu Ser Gly Leu Arg Asp Pro Thr  
                   420                  425                  430  
 Ile Asn Leu Ser Glu Cys His Ile Pro Lys Gly Ser Ser Val Val Asn  
                   435                  440                  445  
 Ser Phe Phe Ser Gln Tyr Val Pro Pro Phe Met Glu Met Leu Lys Glu  
                   450                  455                  460  
 Leu Thr Ser Leu Trp Glu Gly Glu Met Phe Gln Thr Tyr Asn Leu Thr  
                   465                  470                  475                  480  
 Pro Val Val Asp Asn Gln Gly Gln Arg Thr Ser Ile Ala Tyr Ser Gln  
                   485                  490                  495  
 Asp Thr Val Ser Ile Leu Leu Gly Pro Phe Thr Tyr Ile Ile Ala Lys

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          500          505          510
Leu Thr His Met Asp Leu Ile Asn His Ser Leu Ile Ser Leu Ser Leu
          515          520          525
His Asp Ile Ala Asp Gln Leu Tyr Val Asp Ser Arg Leu Ser Val Tyr
          530          535          540
Ile Asn Asp Ile Gly His Lys Tyr Cys Glu Gln Ile Ser Gln Pro Gly
545          550          555          560
Thr Asp Gly Pro Asn Thr Glu Ala Ser Asn Gly Gly Ala Ala Pro Ile
          565          570          575

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<210> 84  
 <211> 2373  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(2373)

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<400> 84
atg gag agt tcc gtc gga tgg acc aaa cac gtc gaa cca aat ccg ggg 48
Met Glu Ser Ser Val Gly Trp Thr Lys His Val Glu Pro Asn Pro Gly
  1          5          10          15

ttc atc ttg aac atg acg tcc gat gcc aaa gtc agg ggt gtc gtg gat 96
Phe Ile Leu Asn Met Thr Ser Asp Ala Lys Val Arg Gly Val Val Asp
          20          25          30

cac gtc agt cgc ctg tca aat ata act acc agc cca ccg gaa atg ggt 144
His Val Ser Arg Leu Ser Asn Ile Thr Thr Ser Pro Pro Glu Met Gly
          35          40          45

tgg tac gac ctg gcc ttc gat ccg gct gaa gac tcc ggg ccg ttc ttg 192
Trp Tyr Asp Leu Ala Phe Asp Pro Ala Glu Asp Ser Gly Pro Phe Leu
          50          55          60

ccg ttt acc gtt tat cta att acg gga act gct ggt gct ggg aaa agt 240
Pro Phe Thr Val Tyr Leu Ile Thr Gly Thr Ala Gly Ala Gly Lys Ser
          65          70          75          80

acc agc ata tcg gcc ctg tac caa aat tta aac tgc ctg atc acg ggc 288
Thr Ser Ile Ser Ala Leu Tyr Gln Asn Leu Asn Cys Leu Ile Thr Gly
          85          90          95

gcg acc acc ata gcc gca cag aac cta tcg cgt cgc cta aag acg ttc 336
Ala Thr Thr Ile Ala Ala Gln Asn Leu Ser Arg Arg Leu Lys Thr Phe
          100          105          110

tgt ccc acg atc ttc agc gct ttt ggc ttt aag agc cga cac atc aat 384
Cys Pro Thr Ile Phe Ser Ala Phe Gly Phe Lys Ser Arg His Ile Asn
          115          120          125

ata gcc gtc aga aaa gct cat cag acc gga gcc gta tcc ata gag caa 432
Ile Ala Val Arg Lys Ala His Gln Thr Gly Ala Val Ser Ile Glu Gln
          130          135          140

att cag caa cag gag cta tcg aag tat tgg ccg gtt ata gtg gac att 480
Ile Gln Gln Gln Glu Leu Ser Lys Tyr Trp Pro Val Ile Val Asp Ile
145          150          155          160

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atg	aaa	gag	gtt	atg	gcg	aaa	aaa	ccc	aat	ggc	atg	tac	ggg	act	ata	528
Met	Lys	Glu	Val	Met	Ala	Lys	Lys	Pro	Asn	Gly	Met	Tyr	Gly	Thr	Ile	
				165					170					175		
tcc	aac	gcg	aat	ttt	gaa	acc	ctc	tcg	aga	atg	acc	gga	ccg	tgt	tta	576
Ser	Asn	Ala	Asn	Phe	Glu	Thr	Leu	Ser	Arg	Met	Thr	Gly	Pro	Cys	Leu	
			180					185					190			
tgg	act	tcc	aat	att	att	gta	atc	gac	gag	gcc	gga	acc	ctg	tcc	tct	624
Trp	Thr	Ser	Asn	Ile	Ile	Val	Ile	Asp	Glu	Ala	Gly	Thr	Leu	Ser	Ser	
		195					200					205				
tac	ata	ctc	acc	acc	gtc	gtg	ttc	ttt	tac	tgg	ttc	cta	aac	agc	tgg	672
Tyr	Ile	Leu	Thr	Thr	Val	Val	Phe	Phe	Tyr	Trp	Phe	Leu	Asn	Ser	Trp	
	210					215					220					
cta	aat	acc	cct	ctt	tac	cgc	cag	ggg	gcg	gtt	ccg	tgc	ata	gta	tgc	720
Leu	Asn	Thr	Pro	Leu	Tyr	Arg	Gln	Gly	Ala	Val	Pro	Cys	Ile	Val	Cys	
225				230					235					240		
gtc	ggt	tcg	cca	acg	cag	aca	aac	gcg	ttc	cag	tca	act	tac	aac	cac	768
Val	Gly	Ser	Pro	Thr	Gln	Thr	Asn	Ala	Phe	Gln	Ser	Thr	Tyr	Asn	His	
			245					250					255			
ggg	acg	caa	aag	acg	gag	ata	tcg	tcg	tgc	gag	aac	atc	cta	aca	ttc	816
Gly	Thr	Gln	Lys	Thr	Glu	Ile	Ser	Ser	Cys	Glu	Asn	Ile	Leu	Thr	Phe	
		260					265						270			
atg	ata	ggg	aag	aag	gtc	gta	tct	gag	tac	gta	cac	ttg	gag	aga	aac	864
Met	Ile	Gly	Lys	Lys	Val	Val	Ser	Glu	Tyr	Val	His	Leu	Glu	Arg	Asn	
	275					280						285				
tgg	gcg	ctg	ttt	ata	aac	aac	aag	cgc	tgc	acc	gat	ctg	cag	ttc	gga	912
Trp	Ala	Leu	Phe	Ile	Asn	Asn	Lys	Arg	Cys	Thr	Asp	Leu	Gln	Phe	Gly	
	290				295						300					
cac	ctt	cta	aaa	att	tta	gag	tat	aat	ctt	ccc	att	cct	gac	gaa	gtc	960
His	Leu	Leu	Lys	Ile	Leu	Glu	Tyr	Asn	Leu	Pro	Ile	Pro	Asp	Glu	Val	
305				310					315					320		
atg	agt	tac	gta	gac	aga	ttt	gtc	gtt	cct	aaa	agt	aag	att	atg	gat	1008
Met	Ser	Tyr	Val	Asp	Arg	Phe	Val	Val	Pro	Lys	Ser	Lys	Ile	Met	Asp	
			325					330					335			
cct	tta	gaa	tac	att	ggc	tgg	acc	cga	ctc	ttt	ttg	tca	cat	agc	gag	1056
Pro	Leu	Glu	Tyr	Ile	Gly	Trp	Thr	Arg	Leu	Phe	Leu	Ser	His	Ser	Glu	
		340					345						350			
gta	aag	gcg	tat	cta	aca	aac	cta	cac	aca	tgt	cta	acg	cta	ggg	ggc	1104
Val	Lys	Ala	Tyr	Leu	Thr	Asn	Leu	His	Thr	Cys	Leu	Thr	Leu	Gly	Gly	
	355					360					365					
gat	acc	agg	gac	acg	aag	ctc	ttt	acc	tgt	ccc	gtg	gtg	tgc	gag	gtg	1152
Asp	Thr	Arg	Asp	Thr	Lys	Leu	Phe	Thr	Cys	Pro	Val	Val	Cys	Glu	Val	
	370					375				380						
ttt	gtg	aag	ccg	ttt	gag	gaa	tac	aag	cgg	gcc	gtc	aac	ctc	acc	aac	1200
Phe	Val	Lys	Pro	Phe	Glu	Glu	Tyr	Lys	Arg	Ala	Val	Asn	Leu	Thr	Asn	
385				390					395					400		

ctc acc gtg acc gag tgg gtg aca aaa aac ctc ttt aag tta agt aat	1248
Leu Thr Val Thr Glu Trp Val Thr Lys Asn Leu Phe Lys Leu Ser Asn	
405 410 415	
tat tcg cag ttt gtg gac cag gac atg tcc ata gtc gcc acg gaa tcc	1296
Tyr Ser Gln Phe Val Asp Gln Asp Met Ser Ile Val Ala Thr Glu Ser	
420 425 430	
act gaa cgt tcg acc cag gtt acc ttt atc acc aag ttt gtt aaa aac	1344
Thr Glu Arg Ser Thr Gln Val Thr Phe Ile Thr Lys Phe Val Lys Asn	
435 440 445	
agc cac gtg tct tta aat gga aaa aca aaa aaa tgc ata tgt ggg ttt	1392
Ser His Val Ser Leu Asn Gly Lys Thr Lys Lys Cys Ile Cys Gly Phe	
450 455 460	
cag ggt acg tac ttt gag ttc aaa aga atc cta gac agc gaa ctc ttc	1440
Gln Gly Thr Tyr Phe Glu Phe Lys Arg Ile Leu Asp Ser Glu Leu Phe	
465 470 475 480	
gtg gag acg cat tcg caa gac cgt ccg gaa tac gta tac ggt ttc tta	1488
Val Glu Thr His Ser Gln Asp Arg Pro Glu Tyr Val Tyr Gly Phe Leu	
485 490 495	
aac acg cta ctg tac aac gcc atg tac tcg ttt cac gcg tac ggc gtg	1536
Asn Thr Leu Leu Tyr Asn Ala Met Tyr Ser Phe His Ala Tyr Gly Val	
500 505 510	
act agg tca cac gag aaa tat ctg caa gac cta aaa ttt gca ccc ctc	1584
Thr Arg Ser His Glu Lys Tyr Leu Gln Asp Leu Lys Phe Ala Pro Leu	
515 520 525	
ccg gcc gct ctg gca acc ggg cgt gta gac ctt caa acg gtt cgt gaa	1632
Pro Ala Ala Leu Ala Thr Gly Arg Val Asp Leu Gln Thr Val Arg Glu	
530 535 540	
gag tta aac ctg gaa gac gac atc ttc tac cac gtg tgc agt ccc ccg	1680
Glu Leu Asn Leu Glu Asp Asp Ile Phe Tyr His Val Cys Ser Pro Pro	
545 550 555 560	
cca ccc gcg ggt atc acc tcc ctc cag gtt ttg gtc gac acg tac tgc	1728
Pro Pro Ala Gly Ile Thr Ser Leu Gln Val Leu Val Asp Thr Tyr Cys	
565 570 575	
gcc cta aag gac gtg ttc gcc tcc aga ata aag gtg gcg tgt cgc tgg	1776
Ala Leu Lys Asp Val Phe Ala Ser Arg Ile Lys Val Ala Cys Arg Trp	
580 585 590	
ttt ggc ggg gag ttt gag aag gaa acg ttt tcc gcg ttt acg gtt aac	1824
Phe Gly Gly Glu Phe Glu Lys Glu Thr Phe Ser Ala Phe Thr Val Asn	
595 600 605	
atg gtc gta agg gac gga gtt gac ttt gtc tcc cct tca gaa cgt ctc	1872
Met Val Val Arg Asp Gly Val Asp Phe Val Ser Pro Ser Glu Arg Leu	
610 615 620	
aac ggg ctg ttg gcg ttt gca tcg acc gtt gaa tcg tat aaa att aag	1920
Asn Gly Leu Leu Ala Phe Ala Ser Thr Val Glu Ser Tyr Lys Ile Lys	
625 630 635 640	
ggg tac acg ttt tta ccg gta gcg ttc ggt cgc tgt cag ggt ttg cca	1968

Gly	Tyr	Thr	Phe	Leu	Pro	Val	Ala	Phe	Gly	Arg	Cys	Gln	Gly	Leu	Pro		
				645					650					655			
ctc	agt	gat	gac	ctc	agg	aag	aag	atg	ccc	tcc	ctg	gtc	gtg	cag	gac		2016
Leu	Ser	Asp	Asp	Leu	Arg	Lys	Lys	Met	Pro	Ser	Leu	Val	Val	Gln	Asp		
			660					665					670				
tct	agc	ggg	ttt	atc	gcg	tgc	cta	gag	aat	aac	ata	acc	aaa	ttg	acc		2064
Ser	Ser	Gly	Phe	Ile	Ala	Cys	Leu	Glu	Asn	Asn	Ile	Thr	Lys	Leu	Thr		
		675					680					685					
gaa	acc	atg	gag	gac	ggg	agc	gtt	ttc	caa	gtg	tgc	tgt	gcg	ggg	gac		2112
Glu	Thr	Met	Glu	Asp	Gly	Ser	Val	Phe	Gln	Val	Cys	Cys	Ala	Gly	Asp		
	690						695					700					
tat	ggg	gtc	agc	tca	aat	tta	gcc	atg	acc	atc	gta	aag	gca	cag	gga		2160
Tyr	Gly	Val	Ser	Ser	Asn	Leu	Ala	Met	Thr	Ile	Val	Lys	Ala	Gln	Gly		
705					710					715				720			
atg	tcg	ttg	gag	cga	gta	gcc	gta	gta	ttt	ggg	tcc	cac	aag	aac	gtc		2208
Met	Ser	Leu	Glu	Arg	Val	Ala	Val	Val	Phe	Gly	Ser	His	Lys	Asn	Val		
				725					730					735			
cag	aca	agc	cac	gtg	tat	gta	gca	ata	tca	agg	gct	gtt	aac	tca	aat		2256
Gln	Thr	Ser	His	Val	Tyr	Val	Ala	Ile	Ser	Arg	Ala	Val	Asn	Ser	Asn		
			740					745					750				
tat	ttg	gtc	atg	gac	agc	aac	ccc	ctt	aaa	acc	ctc	ctc	aga	gaa	cca		2304
Tyr	Leu	Val	Met	Asp	Ser	Asn	Pro	Leu	Lys	Thr	Leu	Leu	Arg	Glu	Pro		
		755					760						765				
gtc	gat	aac	acc	tcc	gcc	aag	cat	ata	gtc	cgc	gcc	ctc	cac	aac	cca		2352
Val	Asp	Asn	Thr	Ser	Ala	Lys	His	Ile	Val	Arg	Ala	Leu	His	Asn	Pro		
	770					775					780						
aac	aca	acc	ctc	atc	tac	taa											2373
Asn	Thr	Thr	Leu	Ile	Tyr												
785					790												

<210> 85  
 <211> 790  
 <212> PRT  
 <213> Macaca mulatta rhadinovirus 17577

<400> 85  
 Met Glu Ser Ser Val Gly Trp Thr Lys His Val Glu Pro Asn Pro Gly  
 1 5 10 15  
 Phe Ile Leu Asn Met Thr Ser Asp Ala Lys Val Arg Gly Val Val Asp  
 20 25 30  
 His Val Ser Arg Leu Ser Asn Ile Thr Thr Ser Pro Pro Glu Met Gly  
 35 40 45  
 Trp Tyr Asp Leu Ala Phe Asp Pro Ala Glu Asp Ser Gly Pro Phe Leu  
 50 55 60  
 Pro Phe Thr Val Tyr Leu Ile Thr Gly Thr Ala Gly Ala Gly Lys Ser  
 65 70 75 80  
 Thr Ser Ile Ser Ala Leu Tyr Gln Asn Leu Asn Cys Leu Ile Thr Gly  
 85 90 95  
 Ala Thr Thr Ile Ala Ala Gln Asn Leu Ser Arg Arg Leu Lys Thr Phe  
 100 105 110  
 Cys Pro Thr Ile Phe Ser Ala Phe Gly Phe Lys Ser Arg His Ile Asn





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Met Val Val Arg Asp Gly Val Asp Phe Val Ser Pro Ser Glu Arg Leu
  610                      615                      620
Asn Gly Leu Leu Ala Phe Ala Ser Thr Val Glu Ser Tyr Lys Ile Lys
  625                      630                      635                      640
Gly Tyr Thr Phe Leu Pro Val Ala Phe Gly Arg Cys Gln Gly Leu Pro
                      645                      650                      655
Leu Ser Asp Asp Leu Arg Lys Lys Met Pro Ser Leu Val Val Gln Asp
                      660                      665                      670
Ser Ser Gly Phe Ile Ala Cys Leu Glu Asn Asn Ile Thr Lys Leu Thr
                      675                      680                      685
Glu Thr Met Glu Asp Gly Ser Val Phe Gln Val Cys Cys Ala Gly Asp
                      690                      695                      700
Tyr Gly Val Ser Ser Asn Leu Ala Met Thr Ile Val Lys Ala Gln Gly
  705                      710                      715                      720
Met Ser Leu Glu Arg Val Ala Val Val Phe Gly Ser His Lys Asn Val
                      725                      730                      735
Gln Thr Ser His Val Tyr Val Ala Ile Ser Arg Ala Val Asn Ser Asn
                      740                      745                      750
Tyr Leu Val Met Asp Ser Asn Pro Leu Lys Thr Leu Leu Arg Glu Pro
                      755                      760                      765
Val Asp Asn Thr Ser Ala Lys His Ile Val Arg Ala Leu His Asn Pro
                      770                      775                      780
Asn Thr Thr Leu Ile Tyr
  785                      790

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<210> 86
<211> 1059
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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<220>
<221> CDS
<222> (1)..(1059)

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<400> 86
atg gct atg ttc tta tcc gac ccg tca agg acc ccg ccg gcc act ccc 48
Met Ala Met Phe Leu Ser Asp Pro Ser Arg Thr Pro Pro Ala Thr Pro
  1                      5                      10                      15

agg atg ctg ccg att ccc ggg gca cct agg aaa aag aga aca aga cgt 96
Arg Met Leu Pro Ile Pro Gly Ala Pro Arg Lys Lys Arg Thr Arg Arg
                      20                      25                      30

ttt ttg ttc gcc ggg tcc cgt acg ggg ttg ccg gta ccg ccc ggg tac 144
Phe Leu Phe Ala Gly Ser Arg Thr Gly Leu Pro Val Pro Pro Gly Tyr
                      35                      40                      45

gga ggc ccc cca gtg att gac atg act gca cct gag gat gtt ttt gac 192
Gly Gly Pro Pro Val Ile Asp Met Thr Ala Pro Glu Asp Val Phe Asp
                      50                      55                      60

caa gat tcc cct ccc act act cca aaa acg cca gac gaa acc gac tct 240
Gln Asp Ser Pro Pro Thr Thr Pro Lys Thr Pro Asp Glu Thr Asp Ser
                      65                      70                      75                      80

cat tcg gag aac agc gac tac agt gat gtg gat gaa gaa gac gaa ccg 288
His Ser Glu Asn Ser Asp Tyr Ser Asp Val Asp Glu Glu Asp Glu Pro
                      85                      90                      95

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ccg gtc tcc tcc cca cct aga ata gat ccg cac gca cgg gac ggt gag	336
Pro Val Ser Ser Pro Pro Arg Ile Asp Pro His Ala Arg Asp Gly Glu	
100 105 110	
tcc ttt aac cag agc ggc cgg cta cct acc gtc att act tcg aca ggt	384
Ser Phe Asn Gln Ser Gly Arg Leu Pro Thr Val Ile Thr Ser Thr Gly	
115 120 125	
gcc acc aca cca ccg agc gcg ccc gcg cca ctg acc gcg ttt ggt ggt	432
Ala Thr Thr Pro Pro Ser Ala Pro Ala Pro Leu Thr Ala Phe Gly Gly	
130 135 140	
ccg cgg ccc gtt gcg gtg gtt act ggc caa cac cgc gca ccc cag tca	480
Pro Arg Pro Val Ala Val Val Thr Gly Gln His Arg Ala Pro Gln Ser	
145 150 155 160	
tct gaa tca gac agc gaa gac gat ttt ttt ata gat gac tac gag gac	528
Ser Glu Ser Asp Ser Glu Asp Asp Phe Phe Ile Asp Asp Tyr Glu Asp	
165 170 175	
act gat gaa agt ggc gga gaa gct gac ggc ttt tcg cca cgg gcc tcg	576
Thr Asp Glu Ser Gly Gly Glu Ala Asp Gly Phe Ser Pro Arg Ala Ser	
180 185 190	
ccc gcc tgg tca ggt gat ata tct aga tca ccg gca gag ggc gga tgg	624
Pro Ala Trp Ser Gly Asp Ile Ser Arg Ser Pro Ala Glu Gly Gly Trp	
195 200 205	
tct tcc gat gaa gaa gaa cct gtt gtt gct gga tca act gca gga caa	672
Ser Ser Asp Glu Glu Glu Pro Val Val Ala Gly Ser Thr Ala Gly Gln	
210 215 220	
gag acc att att att tca gat gac gac gaa gtg gac gac cga ggc tct	720
Glu Thr Ile Ile Ile Ser Asp Asp Asp Glu Val Asp Asp Arg Gly Ser	
225 230 235 240	
gtt gag aca tgg gac gaa tca gac gcc gat gag ggc acg ggc gcc act	768
Val Glu Thr Trp Asp Glu Ser Asp Ala Asp Glu Gly Thr Gly Ala Thr	
245 250 255	
gat gtg att gac ctg tgt tca tct tca gac agc gac gac gat gca gat	816
Asp Val Ile Asp Leu Cys Ser Ser Ser Asp Ser Asp Asp Ala Asp	
260 265 270	
cac gtt aca agc ggc ggt gtt cgt gcc gcc tgc aag agg cgc gcg tca	864
His Val Thr Ser Gly Gly Val Arg Ala Ala Cys Lys Arg Arg Ala Ser	
275 280 285	
cgc agg gac tgc aac ggt gat gac gac gtg att tat gtt ggt aca acc	912
Arg Arg Asp Cys Asn Gly Asp Asp Asp Val Ile Tyr Val Gly Thr Thr	
290 295 300	
cag ggc cct aag aga cgt atg acc tcg acc acg ggg ggc ggg gct act	960
Gln Gly Pro Lys Arg Arg Met Thr Ser Thr Thr Gly Gly Gly Ala Thr	
305 310 315 320	
tct aac cca gag ggc ccg ggc gtt tct ggt cgt caa act atg gcg gcc	1008
Ser Asn Pro Glu Gly Pro Gly Val Ser Gly Arg Gln Thr Met Ala Ala	
325 330 335	
acc ccc ccg gtg tgt gga aat gac aac tat ccg tgg ccg tgg ttg gac	1056

Thr Pro Pro Val Cys Gly Asn Asp Asn Tyr Pro Trp Pro Trp Leu Asp  
 340 345 350

tga

1059

<210> 87  
 <211> 352  
 <212> PRT  
 <213> Macaca mulatta rhadinovirus 17577

<400> 87  
 Met Ala Met Phe Leu Ser Asp Pro Ser Arg Thr Pro Pro Ala Thr Pro  
 1 5 10 15  
 Arg Met Leu Pro Ile Pro Gly Ala Pro Arg Lys Lys Arg Thr Arg Arg  
 20 25 30  
 Phe Leu Phe Ala Gly Ser Arg Thr Gly Leu Pro Val Pro Pro Gly Tyr  
 35 40 45  
 Gly Gly Pro Pro Val Ile Asp Met Thr Ala Pro Glu Asp Val Phe Asp  
 50 55 60  
 Gln Asp Ser Pro Pro Thr Thr Pro Lys Thr Pro Asp Glu Thr Asp Ser  
 65 70 75 80  
 His Ser Glu Asn Ser Asp Tyr Ser Asp Val Asp Glu Glu Asp Glu Pro  
 85 90 95  
 Pro Val Ser Ser Pro Pro Arg Ile Asp Pro His Ala Arg Asp Gly Glu  
 100 105 110  
 Ser Phe Asn Gln Ser Gly Arg Leu Pro Thr Val Ile Thr Ser Thr Gly  
 115 120 125  
 Ala Thr Thr Pro Pro Ser Ala Pro Ala Pro Leu Thr Ala Phe Gly Gly  
 130 135 140  
 Pro Arg Pro Val Ala Val Val Thr Gly Gln His Arg Ala Pro Gln Ser  
 145 150 155 160  
 Ser Glu Ser Asp Ser Glu Asp Asp Phe Phe Ile Asp Asp Tyr Glu Asp  
 165 170 175  
 Thr Asp Glu Ser Gly Gly Glu Ala Asp Gly Phe Ser Pro Arg Ala Ser  
 180 185 190  
 Pro Ala Trp Ser Gly Asp Ile Ser Arg Ser Pro Ala Glu Gly Gly Trp  
 195 200 205  
 Ser Ser Asp Glu Glu Glu Pro Val Val Ala Gly Ser Thr Ala Gly Gln  
 210 215 220  
 Glu Thr Ile Ile Ile Ser Asp Asp Asp Glu Val Asp Asp Arg Gly Ser  
 225 230 235 240  
 Val Glu Thr Trp Asp Glu Ser Asp Ala Asp Glu Gly Thr Gly Ala Thr  
 245 250 255  
 Asp Val Ile Asp Leu Cys Ser Ser Ser Asp Ser Asp Asp Ala Asp  
 260 265 270  
 His Val Thr Ser Gly Gly Val Arg Ala Ala Cys Lys Arg Arg Ala Ser  
 275 280 285  
 Arg Arg Asp Cys Asn Gly Asp Asp Asp Val Ile Tyr Val Gly Thr Thr  
 290 295 300  
 Gln Gly Pro Lys Arg Arg Met Thr Ser Thr Thr Gly Gly Gly Ala Thr  
 305 310 315 320  
 Ser Asn Pro Glu Gly Pro Gly Val Ser Gly Arg Gln Thr Met Ala Ala  
 325 330 335  
 Thr Pro Pro Val Cys Gly Asn Asp Asn Tyr Pro Trp Pro Trp Leu Asp  
 340 345 350

&lt;210&gt; 88

&lt;211&gt; 768

&lt;212&gt; DNA

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(768)

&lt;400&gt; 88

atg	gag	ggt	tgg	ctt	aaa	aca	ata	gtt	tgg	agt	aaa	atg	tca	cca	gaa	48
Met	Glu	Gly	Trp	Leu	Lys	Thr	Ile	Val	Trp	Ser	Lys	Met	Ser	Pro	Glu	
1				5					10					15		

gtg	tta	gaa	gaa	ccc	tcc	aca	caa	acg	ttg	cta	ctt	agc	gac	tca	tgg	96
Val	Leu	Glu	Glu	Pro	Ser	Thr	Gln	Thr	Leu	Leu	Leu	Ser	Asp	Ser	Trp	
			20					25					30			

ctt	gaa	ttt	tta	aat	ctt	tct	cca	ttt	tta	aaa	cag	aag	ctc	gcg	gct	144
Leu	Glu	Phe	Leu	Asn	Leu	Ser	Pro	Phe	Leu	Lys	Gln	Lys	Leu	Ala	Ala	
		35					40					45				

ctg	ctg	aag	cgc	ggt	atg	gat	atg	agc	aac	gta	acc	gtg	att	tat	cca	192
Leu	Leu	Lys	Arg	Val	Met	Asp	Met	Ser	Asn	Val	Thr	Val	Ile	Tyr	Pro	
	50					55					60					

ccg	ata	gat	aga	att	atg	tgg	tgg	tcg	tat	tgt	tgc	gaa	ccg	gag	gat	240
Pro	Ile	Asp	Arg	Ile	Met	Trp	Trp	Ser	Tyr	Cys	Cys	Glu	Pro	Glu	Asp	
	65				70					75				80		

att	aaa	gtc	gtg	atc	ctt	ggc	cag	gat	cct	tac	cat	cgc	ggc	caa	gcc	288
Ile	Lys	Val	Val	Ile	Leu	Gly	Gln	Asp	Pro	Tyr	His	Arg	Gly	Gln	Ala	
			85					90					95			

acc	gga	cta	gcc	ttt	agc	gtt	gct	ccg	gac	tac	agt	ata	cct	cca	agc	336
Thr	Gly	Leu	Ala	Phe	Ser	Val	Ala	Pro	Asp	Tyr	Ser	Ile	Pro	Pro	Ser	
		100						105					110			

ctc	aaa	aat	att	ttt	aaa	gag	ata	gcc	aat	act	gta	cct	ggg	ttc	acc	384
Leu	Lys	Asn	Ile	Phe	Lys	Glu	Ile	Ala	Asn	Thr	Val	Pro	Gly	Phe	Thr	
		115					120					125				

gct	cct	tct	cac	ggg	tgc	tta	gac	tgt	tgg	gca	aaa	cgg	gga	gtt	ctg	432
Ala	Pro	Ser	His	Gly	Cys	Leu	Asp	Cys	Trp	Ala	Lys	Arg	Gly	Val	Leu	
	130					135					140					

ctt	tta	aac	acc	att	ctg	acg	gtg	gaa	aga	ggg	aag	gcg	ggg	tca	cac	480
Leu	Leu	Asn	Thr	Ile	Leu	Thr	Val	Glu	Arg	Gly	Lys	Ala	Gly	Ser	His	
	145				150					155				160		

gcc	aac	ctt	ggc	tgg	gat	tgg	ttc	acc	agc	tac	ata	ata	agc	tgc	ctt	528
Ala	Asn	Leu	Gly	Trp	Asp	Trp	Phe	Thr	Ser	Tyr	Ile	Ile	Ser	Cys	Leu	
		165						170						175		

tct	gcc	aag	ctt	cag	agg	tgc	gtt	ttt	atg	ctg	tgg	gga	aga	aag	gct	576
Ser	Ala	Lys	Leu	Gln	Arg	Cys	Val	Phe	Met	Leu	Trp	Gly	Arg	Lys	Ala	
		180					185						190			

ata	gac	aag	gcg	acg	ctg	ata	aac	gga	cag	aga	cat	ctc	gtc	ctc	aag	624
Ile	Asp	Lys	Ala	Thr	Leu	Ile	Asn	Gly	Gln	Arg	His	Leu	Val	Leu	Lys	
		195				200						205				

gcg cgc cat ccg tct ccc ctg gct acc gcc cac gcg gca acc ggt tct 672  
 Ala Arg His Pro Ser Pro Leu Ala Thr Ala His Ala Ala Thr Gly Ser  
 210 215 220

ccc tgg ccg cag ttt cta ggc tgc aac cat ttt aaa ctt gcg aat gac 720  
 Pro Trp Pro Gln Phe Leu Gly Cys Asn His Phe Lys Leu Ala Asn Asp  
 225 230 235 240

tat cta gtt cag aat cgg agg ggt gcc gtt gac tgg aat att aac tga 768  
 Tyr Leu Val Gln Asn Arg Arg Gly Ala Val Asp Trp Asn Ile Asn  
 245 250 255

<210> 89

<211> 255

<212> PRT

<213> Macaca mulatta rhadinovirus 17577

<400> 89

Met Glu Gly Trp Leu Lys Thr Ile Val Trp Ser Lys Met Ser Pro Glu  
 1 5 10 15  
 Val Leu Glu Glu Pro Ser Thr Gln Thr Leu Leu Leu Ser Asp Ser Trp  
 20 25 30  
 Leu Glu Phe Leu Asn Leu Ser Pro Phe Leu Lys Gln Lys Leu Ala Ala  
 35 40 45  
 Leu Leu Lys Arg Val Met Asp Met Ser Asn Val Thr Val Ile Tyr Pro  
 50 55 60  
 Pro Ile Asp Arg Ile Met Trp Trp Ser Tyr Cys Cys Glu Pro Glu Asp  
 65 70 75 80  
 Ile Lys Val Val Ile Leu Gly Gln Asp Pro Tyr His Arg Gly Gln Ala  
 85 90 95  
 Thr Gly Leu Ala Phe Ser Val Ala Pro Asp Tyr Ser Ile Pro Pro Ser  
 100 105 110  
 Leu Lys Asn Ile Phe Lys Glu Ile Ala Asn Thr Val Pro Gly Phe Thr  
 115 120 125  
 Ala Pro Ser His Gly Cys Leu Asp Cys Trp Ala Lys Arg Gly Val Leu  
 130 135 140  
 Leu Leu Asn Thr Ile Leu Thr Val Glu Arg Gly Lys Ala Gly Ser His  
 145 150 155 160  
 Ala Asn Leu Gly Trp Asp Trp Phe Thr Ser Tyr Ile Ile Ser Cys Leu  
 165 170 175  
 Ser Ala Lys Leu Gln Arg Cys Val Phe Met Leu Trp Gly Arg Lys Ala  
 180 185 190  
 Ile Asp Lys Ala Thr Leu Ile Asn Gly Gln Arg His Leu Val Leu Lys  
 195 200 205  
 Ala Arg His Pro Ser Pro Leu Ala Thr Ala His Ala Ala Thr Gly Ser  
 210 215 220  
 Pro Trp Pro Gln Phe Leu Gly Cys Asn His Phe Lys Leu Ala Asn Asp  
 225 230 235 240  
 Tyr Leu Val Gln Asn Arg Arg Gly Ala Val Asp Trp Asn Ile Asn  
 245 250 255

<210> 90

<211> 510

<212> DNA

<213> Macaca mulatta rhadinovirus 17577

<220>

<221> CDS

&lt;222&gt; (1) .. (510)

&lt;400&gt; 90

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atg aga agt atg tat acc tta agt tta ttt att aca tgt gga ttt ttt 48
Met Arg Ser Met Tyr Thr Leu Ser Leu Phe Ile Thr Cys Gly Phe Phe
  1             5             10             15

tta att aca tgt tgt acc ggg ctt gta gta aat cca tgt tgt aaa ata 96
Leu Ile Thr Cys Cys Thr Gly Leu Val Val Asn Pro Cys Cys Lys Ile
             20             25             30

ata cca ctt agt gac ttt ata ttt ccg gag ccg ttt gag att gct tct 144
Ile Pro Leu Ser Asp Phe Ile Phe Pro Glu Pro Phe Glu Ile Ala Ser
             35             40             45

ttt cat tta aca aat tta gct tta tgt cca ggg ctg tgt aca gca aca 192
Phe His Leu Thr Asn Leu Ala Leu Cys Pro Gly Leu Cys Thr Ala Thr
             50             55             60

ttg cga tat aaa gct gat cgc tct acc aca gaa ata tgt gta aat gga 240
Leu Arg Tyr Lys Ala Asp Arg Ser Thr Thr Glu Ile Cys Val Asn Gly
             65             70             75             80

ttt cac ctt agg gcg ttt ttt ata agg att ttg tac aag tta aat tac 288
Phe His Leu Arg Ala Phe Phe Ile Arg Ile Leu Tyr Lys Leu Asn Tyr
             85             90             95

agt gtc ccc aga gaa gag ctt caa ttg ttg aat tat atg caa tat agt 336
Ser Val Pro Arg Glu Glu Leu Gln Leu Leu Asn Tyr Met Gln Tyr Ser
             100             105             110

ctt gat gag ttt tta gcc gag ttt gaa gac ttt cac ata aac ggt agt 384
Leu Asp Glu Phe Leu Ala Glu Phe Glu Asp Phe His Ile Asn Gly Ser
             115             120             125

gaa agc gga act gct tat acg cgg cca cct ctg ttg gat ttc tca gac 432
Glu Ser Gly Thr Ala Tyr Thr Arg Pro Pro Leu Leu Asp Phe Ser Asp
             130             135             140

aga agt aca aaa gtt tca cgt ata cgt aaa gta att acc aga cgc ggg 480
Arg Ser Thr Lys Val Ser Arg Ile Arg Lys Val Ile Thr Arg Arg Gly
             145             150             155             160

gat tta tgg agg gtt ggc tta aaa caa tag 510
Asp Leu Trp Arg Val Gly Leu Lys Gln
             165             170

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&lt;210&gt; 91

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 91

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Met Arg Ser Met Tyr Thr Leu Ser Leu Phe Ile Thr Cys Gly Phe Phe
  1             5             10             15
Leu Ile Thr Cys Cys Thr Gly Leu Val Val Asn Pro Cys Cys Lys Ile
             20             25             30
Ile Pro Leu Ser Asp Phe Ile Phe Pro Glu Pro Phe Glu Ile Ala Ser
             35             40             45
Phe His Leu Thr Asn Leu Ala Leu Cys Pro Gly Leu Cys Thr Ala Thr

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      50              55              60
Leu Arg Tyr Lys Ala Asp Arg Ser Thr Thr Glu Ile Cys Val Asn Gly
65              70              75              80
Phe His Leu Arg Ala Phe Phe Ile Arg Ile Leu Tyr Lys Leu Asn Tyr
      85              90              95
Ser Val Pro Arg Glu Glu Leu Gln Leu Leu Asn Tyr Met Gln Tyr Ser
      100             105             110
Leu Asp Glu Phe Leu Ala Glu Phe Glu Asp Phe His Ile Asn Gly Ser
      115             120             125
Glu Ser Gly Thr Ala Tyr Thr Arg Pro Pro Leu Leu Asp Phe Ser Asp
      130             135             140
Arg Ser Thr Lys Val Ser Arg Ile Arg Lys Val Ile Thr Arg Arg Gly
145             150             155             160
Asp Leu Trp Arg Val Gly Leu Lys Gln
      165

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<210> 92
<211> 1170
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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<220>
<221> CDS
<222> (1)..(1170)

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<400> 92
atg gct gtt tcc att cca gtt aag ggt gtt aac agg gag aca gag tct 48
Met Ala Val Ser Ile Pro Val Lys Gly Val Asn Arg Glu Thr Glu Ser
  1              5              10              15

aac tgg aga tcc atc gtg act acc ttt gaa cga cat gga aac gcg gat 96
Asn Trp Arg Ser Ile Val Thr Thr Phe Glu Arg His Gly Asn Ala Asp
      20              25              30

aga gcc atc cgg tcg ctt ttg cga ttt ttt aaa ggt gtc gac cat cct 144
Arg Ala Ile Arg Ser Leu Leu Arg Phe Phe Lys Gly Val Asp His Pro
      35              40              45

ggg ttt tta gcg tct ttg gtt ata ctt aaa gat gta act ata gat tca 192
Gly Phe Leu Ala Ser Leu Val Ile Leu Lys Asp Val Thr Ile Asp Ser
      50              55              60

gag aaa acg ata gaa aga acg gac ctt att ccc ctt tta cag gga gtg 240
Glu Lys Thr Ile Glu Arg Thr Asp Leu Ile Pro Leu Leu Gln Gly Val
      65              70              75              80

agg ttt gtt acc caa cag ata tat atg cac cta aaa gat cac gcg agc 288
Arg Phe Val Thr Gln Gln Ile Tyr Met His Leu Lys Asp His Ala Ser
      85              90              95

gaa tct cct atg gcc gag ata tgg cgc gac tgc aaa gag cgc ttc tgc 336
Glu Ser Pro Met Ala Glu Ile Trp Arg Asp Cys Lys Glu Arg Phe Cys
      100             105             110

ctc gct ctg gaa ctg gcg tgc ggc tgt caa agg tgc gcg agc gcc gcc 384
Leu Ala Leu Glu Leu Ala Cys Gly Cys Gln Arg Cys Ala Ser Ala Ala
      115             120             125

agg cag cta cgg gcc tgt cag caa gcc tgc agg cca cct aag ctg aat 432

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Arg	Gln	Leu	Arg	Ala	Cys	Gln	Gln	Ala	Cys	Arg	Pro	Pro	Lys	Leu	Asn	
130						135					140					
cct	cac	aag	cag	cag	tgt	gtg	gcc	gct	cgt	ctc	tta	acc	gca	gtt	tat	480
Pro	His	Lys	Gln	Gln	Cys	Val	Ala	Ala	Arg	Leu	Leu	Thr	Ala	Val	Tyr	
145					150					155					160	
aac	cag	atg	gtg	ctc	aga	act	agg	gtt	tcg	gtt	tcg	gaa	ttt	tgt	ctg	528
Asn	Gln	Met	Val	Leu	Arg	Thr	Arg	Val	Ser	Val	Ser	Glu	Phe	Cys	Leu	
				165					170					175		
aac	gct	ttg	atg	tgc	gtt	cct	aga	gag	ttc	ggg	ttt	gtg	agc	ggg	gat	576
Asn	Ala	Leu	Met	Cys	Val	Pro	Arg	Glu	Phe	Gly	Phe	Val	Ser	Gly	Asp	
			180					185						190		
gtc	cgg	gtg	gaa	acc	agc	cgc	gtt	gcc	tcc	tgt	ttg	aac	ttg	tcg	tgg	624
Val	Arg	Val	Glu	Thr	Ser	Arg	Val	Ala	Ser	Cys	Leu	Asn	Leu	Ser	Trp	
			195					200					205			
tta	tac	ttg	att	tta	gac	tcg	tat	gtt	cga	aca	gat	tta	aca	aat	ctg	672
Leu	Tyr	Leu	Ile	Leu	Asp	Ser	Tyr	Val	Arg	Thr	Asp	Leu	Thr	Asn	Leu	
			210					215								
gaa	atg	gca	atg	agc	cgt	gcc	tgc	cgc	att	cac	ggc	ctt	agc	gcc	ggg	720
Glu	Met	Ala	Met	Ser	Arg	Ala	Cys	Arg	Ile	His	Gly	Leu	Ser	Ala	Gly	
225					230					235					240	
gac	ccg	ttt	tat	tcc	gcc	ctc	gtg	tgg	tta	aaa	aat	agt	tac	gca	tgt	768
Asp	Pro	Phe	Tyr	Ser	Ala	Leu	Val	Trp	Leu	Lys	Asn	Ser	Tyr	Ala	Cys	
				245					250					255		
gac	acg	aat	aca	ttt	ttt	ttc	acc	gtc	aat	tca	acc	agt	gtc	acg	act	816
Asp	Thr	Asn	Thr	Phe	Phe	Phe	Thr	Val	Asn	Ser	Thr	Ser	Val	Thr	Thr	
			260						265					270		
cca	atc	tta	atg	gac	ata	tgt	gcg	tca	ttg	acg	ggg	ccg	gtt	cct	gat	864
Pro	Ile	Leu	Met	Asp	Ile	Cys	Ala	Ser	Leu	Thr	Gly	Pro	Val	Pro	Asp	
			275					280					285			
gtt	ata	aaa	ata	aat	atg	ctg	ccc	ctc	gtg	aac	gat	caa	atg	cat	cct	912
Val	Ile	Lys	Ile	Asn	Met	Leu	Pro	Leu	Val	Asn	Asp	Gln	Met	His	Pro	
			290				295					300				
tcc	gtt	tgt	gtg	gag	cgt	gcc	aat	ttt	acg	ggg	tct	tgt	ccc	aaa	gtg	960
Ser	Val	Cys	Val	Glu	Arg	Ala	Asn	Phe	Thr	Gly	Ser	Cys	Pro	Lys	Val	
305					310					315					320	
tca	ccc	act	cac	cat	ttg	gat	ggg	cta	aaa	tta	gaa	aca	aca	tcc	ttg	1008
Ser	Pro	Thr	His	His	Leu	Asp	Gly	Leu	Lys	Leu	Glu	Thr	Thr	Ser	Leu	
				325					330					335		
aca	tta	gca	gct	gat	tca	ctg	gat	gat	att	tta	caa	gcc	ctg	gaa	tta	1056
Thr	Leu	Ala	Ala	Asp	Ser	Leu	Asp	Asp	Ile	Leu	Gln	Ala	Leu	Glu	Leu	
				340				345						350		
att	tgt	ggc	gat	gac	gag	ggg	atc	ctg	gac	tca	tat	att	tcc	gac	att	1104
Ile	Cys	Gly	Asp	Asp	Glu	Gly	Ile	Leu	Asp	Ser	Tyr	Ile	Ser	Asp	Ile	
			355				360						365			
aac	acg	gaa	acc	gag	gtt	gat	gag	tca	tca	att	gaa	gag	gaa	att	gtc	1152
Asn	Thr	Glu	Thr	Glu	Val	Asp	Glu	Ser	Ser	Ile	Glu	Glu	Glu	Ile	Val	



370 375 380  
 ttt gag gag ctt agc taa 1170  
 Phe Glu Glu Leu Ser  
 385 390

<210> 93  
 <211> 389  
 <212> PRT  
 <213> Macaca mulatta rhadinovirus 17577

<400> 93  
 Met Ala Val Ser Ile Pro Val Lys Gly Val Asn Arg Glu Thr Glu Ser  
 1 5 10 15  
 Asn Trp Arg Ser Ile Val Thr Thr Phe Glu Arg His Gly Asn Ala Asp  
 20 25 30  
 Arg Ala Ile Arg Ser Leu Leu Arg Phe Phe Lys Gly Val Asp His Pro  
 35 40 45  
 Gly Phe Leu Ala Ser Leu Val Ile Leu Lys Asp Val Thr Ile Asp Ser  
 50 55 60  
 Glu Lys Thr Ile Glu Arg Thr Asp Leu Ile Pro Leu Leu Gln Gly Val  
 65 70 75 80  
 Arg Phe Val Thr Gln Gln Ile Tyr Met His Leu Lys Asp His Ala Ser  
 85 90 95  
 Glu Ser Pro Met Ala Glu Ile Trp Arg Asp Cys Lys Glu Arg Phe Cys  
 100 105 110  
 Leu Ala Leu Glu Leu Ala Cys Gly Cys Gln Arg Cys Ala Ser Ala Ala  
 115 120 125  
 Arg Gln Leu Arg Ala Cys Gln Gln Ala Cys Arg Pro Pro Lys Leu Asn  
 130 135 140  
 Pro His Lys Gln Gln Cys Val Ala Ala Arg Leu Leu Thr Ala Val Tyr  
 145 150 155 160  
 Asn Gln Met Val Leu Arg Thr Arg Val Ser Val Ser Glu Phe Cys Leu  
 165 170 175  
 Asn Ala Leu Met Cys Val Pro Arg Glu Phe Gly Phe Val Ser Gly Asp  
 180 185 190  
 Val Arg Val Glu Thr Ser Arg Val Ala Ser Cys Leu Asn Leu Ser Trp  
 195 200 205  
 Leu Tyr Leu Ile Leu Asp Ser Tyr Val Arg Thr Asp Leu Thr Asn Leu  
 210 215 220  
 Glu Met Ala Met Ser Arg Ala Cys Arg Ile His Gly Leu Ser Ala Gly  
 225 230 235 240  
 Asp Pro Phe Tyr Ser Ala Leu Val Trp Leu Lys Asn Ser Tyr Ala Cys  
 245 250 255  
 Asp Thr Asn Thr Phe Phe Phe Thr Val Asn Ser Thr Ser Val Thr Thr  
 260 265 270  
 Pro Ile Leu Met Asp Ile Cys Ala Ser Leu Thr Gly Pro Val Pro Asp  
 275 280 285  
 Val Ile Lys Ile Asn Met Leu Pro Leu Val Asn Asp Gln Met His Pro  
 290 295 300  
 Ser Val Cys Val Glu Arg Ala Asn Phe Thr Gly Ser Cys Pro Lys Val  
 305 310 315 320  
 Ser Pro Thr His His Leu Asp Gly Leu Lys Glu Thr Thr Ser Leu  
 325 330 335  
 Thr Leu Ala Ala Asp Ser Leu Asp Asp Ile Leu Gln Ala Leu Glu Leu  
 340 345 350  
 Ile Cys Gly Asp Asp Glu Gly Ile Leu Asp Ser Tyr Ile Ser Asp Ile  
 355 360 365  
 Asn Thr Glu Thr Glu Val Asp Glu Ser Ser Ile Glu Glu Ile Val  
 370 375 380

Phe Glu Glu Leu Ser  
385

<210> 94  
<211> 906  
<212> DNA  
<213> Macaca mulatta rhadinovirus 17577

<220>  
<221> CDS  
<222> (1)..(906)

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<400> 94
atg agt cgc cat tac ggg aaa gac cat ctt tta aat cat atg tac aag 48
Met Ser Arg His Tyr Gly Lys Asp His Leu Leu Asn His Met Tyr Lys
    1              5              10              15

ttc cac tat ccg cca ctc ggc atg ata gtc ggt gaa atg aac aca ctg 96
Phe His Tyr Pro Pro Leu Gly Met Ile Val Gly Glu Met Asn Thr Leu
          20              25              30

acc gtc aat gcc cgc aat ccg ctc tac caa gcg gca acc ctt aga gtg 144
Thr Val Asn Ala Arg Asn Pro Leu Tyr Gln Ala Ala Thr Leu Arg Val
          35              40              45

gaa cgg gcc cta tac ctg tct aag ata ctc cag gtg ctc atg caa cac 192
Glu Arg Ala Leu Tyr Leu Ser Lys Ile Leu Gln Val Leu Met Gln His
          50              55              60

aga caa gga gag cgg ttc atc gta ccg cag tgt cgg agc aac atg gtt 240
Arg Gln Gly Glu Arg Phe Ile Val Pro Gln Cys Arg Ser Asn Met Val
          65              70              75              80

tac tgt cta aag gag ctc cac aaa att acg aac gat aga att cgg gga 288
Tyr Cys Leu Lys Glu Leu His Lys Ile Thr Asn Asp Arg Ile Arg Gly
          85              90              95

ctt att aac tca gta ctg ccc ctg gtg gat gcg ggc tgc gta gga ttt 336
Leu Ile Asn Ser Val Leu Pro Leu Val Asp Ala Gly Cys Val Gly Phe
          100              105              110

gac gaa gaa ctc gta cgc gtc ctg ccg gag atc cta aaa ctg gag tac 384
Asp Glu Glu Leu Val Arg Val Leu Pro Glu Ile Leu Lys Leu Glu Tyr
          115              120              125

ccc cac gcc cac gaa ttg tta ccc cct cac gat ccg acc tcc ccc ctg 432
Pro His Ala His Glu Leu Leu Pro Pro His Asp Pro Thr Ser Pro Leu
          130              135              140

agc tgg tgc cta tct cac atg gtc ggt gta acc aaa acc ttc aaa ggg 480
Ser Trp Cys Leu Ser His Met Val Gly Val Thr Lys Thr Phe Lys Gly
          145              150              155              160

gag gtg aag gag atg ata gac act ttt cac gac ctg tcc gta cca tcg 528
Glu Val Lys Glu Met Ile Asp Thr Phe His Asp Leu Ser Val Pro Ser
          165              170              175

ttt cag tac ctg gcg agt ttg gtt aaa aaa ttt ttt ctt gtt gag gag 576
Phe Gln Tyr Leu Ala Ser Leu Val Lys Lys Phe Phe Leu Val Glu Glu

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180	185	190	
ggt ata tac gag gac tac cag gac acg cag ttt aac gtg ttt tta aat			624
Val Ile Tyr Glu Asp Tyr Gln Asp Thr Gln Phe Asn Val Phe Leu Asn			
195	200	205	
ctt tgt ttt ttt tgg acc act gtc ata aag atg tac cag agt tgc att			672
Leu Cys Phe Phe Trp Thr Thr Val Ile Lys Met Tyr Gln Ser Cys Ile			
210	215	220	
ttt aaa gac aag cta ttg gac acg att aaa gct tgc ata gag ctt cta			720
Phe Lys Asp Lys Leu Leu Asp Thr Ile Lys Ala Cys Ile Glu Leu Leu			
225	230	235	240
aaa ggc gag gcc agg cag ttt ttt ggt tgg tac gac cta aac acg cca			768
Lys Gly Glu Ala Arg Gln Phe Phe Gly Trp Tyr Asp Leu Asn Thr Pro			
	245	250	255
aat tta ggt tca tcg gca cta gta aag tac aca gag cac ctg atc cga			816
Asn Leu Gly Ser Ser Ala Leu Val Lys Tyr Thr Glu His Leu Ile Arg			
	260	265	270
gca cta agt gtg gat tca tca gcc att ccc att ggc gag ata tgc tcc			864
Ala Leu Ser Val Asp Ser Ser Ala Ile Pro Ile Gly Glu Ile Cys Ser			
	275	280	285
cac cta cac cac tgt aaa cac gcc ctc ctg aat ctt gaa taa			906
His Leu His His Cys Lys His Ala Leu Leu Asn Leu Glu			
	290	295	300

&lt;210&gt; 95

&lt;211&gt; 301

&lt;212&gt; PRT

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 95

Met Ser Arg His Tyr Gly Lys Asp His Leu Leu Asn His Met Tyr Lys			
1	5	10	15
Phe His Tyr Pro Pro Leu Gly Met Ile Val Gly Glu Met Asn Thr Leu			
	20	25	30
Thr Val Asn Ala Arg Asn Pro Leu Tyr Gln Ala Ala Thr Leu Arg Val			
	35	40	45
Glu Arg Ala Leu Tyr Leu Ser Lys Ile Leu Gln Val Leu Met Gln His			
	50	55	60
Arg Gln Gly Glu Arg Phe Ile Val Pro Gln Cys Arg Ser Asn Met Val			
	65	70	75
Tyr Cys Leu Lys Glu Leu His Lys Ile Thr Asn Asp Arg Ile Arg Gly			
	85	90	95
Leu Ile Asn Ser Val Leu Pro Leu Val Asp Ala Gly Cys Val Gly Phe			
	100	105	110
Asp Glu Glu Leu Val Arg Val Leu Pro Glu Ile Leu Lys Leu Glu Tyr			
	115	120	125
Pro His Ala His Glu Leu Leu Pro Pro His Asp Pro Thr Ser Pro Leu			
	130	135	140
Ser Trp Cys Leu Ser His Met Val Gly Val Thr Lys Thr Phe Lys Gly			
	145	150	155
Glu Val Lys Glu Met Ile Asp Thr Phe His Asp Leu Ser Val Pro Ser			
	165	170	175
Phe Gln Tyr Leu Ala Ser Leu Val Lys Lys Phe Phe Leu Val Glu Glu			
	180	185	190

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Val Ile Tyr Glu Asp Tyr Gln Asp Thr Gln Phe Asn Val Phe Leu Asn
      195                      200                      205
Leu Cys Phe Phe Trp Thr Thr Val Ile Lys Met Tyr Gln Ser Cys Ile
      210                      215                      220
Phe Lys Asp Lys Leu Leu Asp Thr Ile Lys Ala Cys Ile Glu Leu Leu
      225                      230                      235                      240
Lys Gly Glu Ala Arg Gln Phe Phe Gly Trp Tyr Asp Leu Asn Thr Pro
      245                      250                      255
Asn Leu Gly Ser Ser Ala Leu Val Lys Tyr Thr Glu His Leu Ile Arg
      260                      265                      270
Ala Leu Ser Val Asp Ser Ser Ala Ile Pro Ile Gly Glu Ile Cys Ser
      275                      280                      285
His Leu His His Cys Lys His Ala Leu Leu Asn Leu Glu
      290                      295                      300

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<210> 96
<211> 1545
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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<220>
<221> CDS
<222> (1)..(1545)

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<400> 96
atg gaa tgt gcc tcc ctg ggt ccc atc tcc ggg ctc atc gcg gat ctg      48
Met Glu Cys Ala Ser Leu Gly Pro Ile Ser Gly Leu Ile Ala Asp Leu
   1                      5                      10                      15

aat ctc ttt aac ctg ttc tgc ctc tac cgg ggt tcc cgg gtt aaa acc      96
Asn Leu Phe Asn Leu Phe Cys Leu Tyr Arg Gly Ser Arg Val Lys Thr
      20                      25                      30

cgc ggg gcc gcc acc tgt aac gtc ccg tgc gca gaa tgc gcc cag ggc      144
Arg Gly Ala Ala Thr Cys Asn Val Pro Cys Ala Glu Cys Ala Gln Gly
      35                      40                      45

atc gtg aga att ctc acc gag agg gcc ctt tgt tgt acc gaa aag atg      192
Ile Val Arg Ile Leu Thr Glu Arg Ala Leu Cys Cys Thr Glu Lys Met
      50                      55                      60

ttc ata gcg tct gcc tgc agc ggg gtc gtt ata ccg ccc cag ttg gcc      240
Phe Ile Ala Ser Ala Cys Ser Gly Val Val Ile Pro Pro Gln Leu Ala
      65                      70                      75                      80

aga gtt ctg cac gac gtc tac gcg gaa atg aag gcc aag tgt ttg ggg      288
Arg Val Leu His Asp Val Tyr Ala Glu Met Lys Ala Lys Cys Leu Gly
      85                      90                      95

gcg tgg cgt cgt ctc ata tgt tgc agg cgg cct atc atg gct att gcc      336
Ala Trp Arg Arg Leu Ile Cys Cys Arg Arg Pro Ile Met Ala Ile Ala
      100                      105                      110

gac tcg gtc ctc gtc act tat aat acc ctg gat gcc gag gga aaa ctg      384
Asp Ser Val Leu Val Thr Tyr Asn Thr Leu Asp Ala Glu Gly Lys Leu
      115                      120                      125

gaa ctt aga ctc aaa gca ctg tgc aaa ctt gtt ttt caa ccc atc ttt      432
Glu Leu Arg Leu Lys Ala Leu Cys Lys Leu Val Phe Gln Pro Ile Phe

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130	135	140	
ctt caa aga atc tta gcc	cct atg cag cta ctg gcc	aac ggg aag atg	480
Leu Gln Arg Ile Leu Ala	Pro Met Gln Leu Leu Ala	Asn Gly Lys Met	
145	150	155	160
gtt cct gac aat tat ttt	acc atc acc ggt acg gcc	gag aag agg cgc	528
Val Pro Asp Asn Tyr Phe	Thr Ile Thr Gly Thr Ala	Glu Lys Arg Arg	
165	170	175	
cct gtc gtg act gga agt	act agc ggg atg acg tgt	ccg gga agc agc	576
Pro Val Val Thr Gly Ser	Thr Ser Gly Met Thr Cys	Pro Gly Ser Ser	
180	185	190	
ctt gtc ccc gat tcc tta	atc ctg cca gta tgc gaa	ccg ggg ctt ctc	624
Leu Val Pro Asp Ser Leu	Ile Leu Pro Val Cys Glu	Pro Gly Leu Leu	
195	200	205	
ccg gca ccc ctg gtt gac	ctc agt aat gtc tta gaa	aat cca gaa atc	672
Pro Ala Pro Leu Val Asp	Leu Ser Asn Val Leu Glu	Asn Pro Glu Ile	
210	215	220	
atc ctc agc gcc cca ccc	ctg agt caa ttt gtc atc	aca aac acg cac	720
Ile Leu Ser Ala Pro Pro	Leu Ser Gln Phe Val Ile	Thr Asn Thr His	
225	230	235	240
ccc agt ctg cct cag tca	gtc agc att att acg cca	acc cag ggc gtt	768
Pro Ser Leu Pro Gln Ser	Val Ser Ile Ile Thr Pro	Thr Gln Gly Val	
245	250	255	
gtt ccc ggc caa tgt ttt	atg gac acg tgg aaa gcg	gtg tca cag agc	816
Val Pro Gly Gln Cys Phe	Met Asp Thr Trp Lys Ala	Val Ser Gln Ser	
260	265	270	
att cac cac cag gca cag	acg cct att ttg gcc gcc	gca cta acc ggt	864
Ile His His Gln Ala Gln	Thr Pro Ile Leu Ala Ala	Ala Leu Thr Gly	
275	280	285	
tcg aca tct gcg gcc cct	ggc ccg cat atc gca tgt	tcc cca gtt gcc	912
Ser Thr Ser Ala Ala Pro	Gly Pro His Ile Ala Cys	Ser Pro Val Ala	
290	295	300	
ggc acg tct cgg cag gtg	gaa ggg tcc gcg ggc gtc	gat tgc ggg aaa	960
Gly Thr Ser Arg Gln Val	Glu Gly Ser Ala Gly Val	Asp Cys Gly Lys	
305	310	315	320
cca gca tgc gtt ccg cag	ccc gcg tta ccg ccc aat	gtc ccc gcc aag	1008
Pro Ala Cys Val Pro Gln	Pro Ala Leu Pro Pro Asn	Val Pro Ala Lys	
325	330	335	
agg atg gaa acg gta gca	cag ttg gga aac gct ccc	gta aaa aac gtc	1056
Arg Met Glu Thr Val Ala	Gln Leu Gly Asn Ala Pro	Val Lys Asn Val	
340	345	350	
cac atc gga ggc cgc gta	tac gct cca ctg gtt aat	ata cca ata ata	1104
His Ile Gly Gly Arg Val	Tyr Ala Pro Leu Val Asn	Ile Pro Ile Ile	
355	360	365	
gac tta acg tcc ccg tca	ggg tcc ggc cag agt ccg	gcc gat atc gcc	1152
Asp Leu Thr Ser Pro Ser	Gly Ser Gly Gln Ser Pro	Ala Asp Ile Ala	
370	375	380	

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aac act cca gag tcc cgc atg gcg gcc ggc tct ccg ccc ttc gcc gaa 1200
Asn Thr Pro Glu Ser Arg Met Ala Ala Gly Ser Pro Pro Phe Ala Glu
385                               390                               395                               400

acc gcc gca acg gtc ccc gct aag aga aag cag cca cgc gag gac gtg 1248
Thr Ala Ala Thr Val Pro Ala Lys Arg Lys Gln Pro Arg Glu Asp Val
                               405                               410                               415

gca gac aaa aga ctg aag ggc gac gtt cgg ggc gcc gca aca gta aac 1296
Ala Asp Lys Arg Leu Lys Gly Asp Val Arg Gly Ala Ala Thr Val Asn
                               420                               425                               430

cac cct ttc ccg gga ccg tcc ggg atg cgc gtt cgc gag cag ggc tta 1344
His Pro Phe Pro Gly Pro Ser Gly Met Arg Val Arg Glu Gln Gly Leu
                               435                               440                               445

ttc gat tta atc gaa agc tcc acg gat gta acc gcg aac gca tct gga 1392
Phe Asp Leu Ile Glu Ser Ser Thr Asp Val Thr Ala Asn Ala Ser Gly
                               450                               455                               460

ccc aaa aac gac gac gac atg cta gcg gct atc cta cag gac ctg tat 1440
Pro Lys Asn Asp Asp Asp Met Leu Ala Ala Ile Leu Gln Asp Leu Tyr
465                               470                               475                               480

gga cta cag tcc ccc ccg gcc atc gat tcc ccc tcc agc aac tcg gac 1488
Gly Leu Gln Ser Pro Pro Ala Ile Asp Ser Pro Ser Ser Asn Ser Asp
                               485                               490                               495

aat gag gag ata ttt cca gag gtt agt ccg cca tct agc ggc cac gga 1536
Asn Glu Glu Ile Phe Pro Glu Val Ser Pro Pro Ser Ser Gly His Gly
                               500                               505                               510

tcg cct tga 1545
Ser Pro
515

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<210> 97
<211> 514
<212> PRT
<213> Macaca mulatta rhadinovirus 17577

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<400> 97
Met Glu Cys Ala Ser Leu Gly Pro Ile Ser Gly Leu Ile Ala Asp Leu
 1           5           10           15
Asn Leu Phe Asn Leu Phe Cys Leu Tyr Arg Gly Ser Arg Val Lys Thr
          20          25          30
Arg Gly Ala Ala Thr Cys Asn Val Pro Cys Ala Glu Cys Ala Gln Gly
          35          40          45
Ile Val Arg Ile Leu Thr Glu Arg Ala Leu Cys Cys Thr Glu Lys Met
          50          55          60
Phe Ile Ala Ser Ala Cys Ser Gly Val Val Ile Pro Pro Gln Leu Ala
          65          70          75          80
Arg Val Leu His Asp Val Tyr Ala Glu Met Lys Ala Lys Cys Leu Gly
          85          90          95
Ala Trp Arg Arg Leu Ile Cys Cys Arg Arg Pro Ile Met Ala Ile Ala
          100         105         110
Asp Ser Val Leu Val Thr Tyr Asn Thr Leu Asp Ala Glu Gly Lys Leu
          115         120         125
Glu Leu Arg Leu Lys Ala Leu Cys Lys Leu Val Phe Gln Pro Ile Phe

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130		135		140	
Leu	Gln	Arg	Ile	Leu	Ala
145		150		155	
Val	Pro	Asp	Asn	Tyr	Phe
		165		170	
Pro	Val	Val	Thr	Gly	Ser
		180		185	
Leu	Val	Pro	Asp	Ser	Leu
		195		200	
Pro	Ala	Pro	Leu	Val	Asp
		210		215	
Ile	Leu	Ser	Ala	Pro	Pro
225				230	
Pro	Ser	Leu	Pro	Gln	Ser
				245	
Val	Pro	Gly	Gln	Cys	Phe
				260	
Ile	His	His	Gln	Ala	Gln
				275	
Ser	Thr	Ser	Ala	Ala	Pro
				290	
Gly	Thr	Ser	Arg	Gln	Val
305				310	
Pro	Ala	Cys	Val	Pro	Gln
				325	
Arg	Met	Glu	Thr	Val	Ala
				340	
His	Ile	Gly	Arg	Val	Tyr
				355	
Asp	Leu	Thr	Ser	Pro	Ser
				370	
Asn	Thr	Pro	Glu	Ser	Arg
385				390	
Thr	Ala	Ala	Thr	Val	Pro
				405	
Ala	Asp	Lys	Arg	Leu	Lys
				420	
His	Pro	Phe	Pro	Gly	Pro
				435	
Phe	Asp	Leu	Ile	Glu	Ser
				450	
Pro	Lys	Asn	Asp	Asp	Asp
465				470	
Gly	Leu	Gln	Ser	Pro	Pro
				485	
Asn	Glu	Glu	Ile	Phe	Pro
				500	
Ser	Pro				

<210> 98  
 <211> 534  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(534)

<400> 98

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atg cct cgt gtg aaa aca caa ccc aag aga ccc caa gtg ctt gaa ttt 48
Met Pro Arg Val Lys Thr Gln Pro Lys Arg Pro Gln Val Leu Glu Phe
1 5 10 15

atg cca tta gat ctc cac ggt gga aca cac acg gag atg gat tct caa 96
Met Pro Leu Asp Leu His Gly Gly Thr His Thr Glu Met Asp Ser Gln
20 25 30

aac ctg tgt cct gac ggc cag gat ctg ctc ggg tct tat atc tat acg 144
Asn Leu Cys Pro Asp Gly Gln Asp Leu Leu Gly Ser Tyr Ile Tyr Thr
35 40 45

gag aat aac ggc ccg ttt tcc caa ata atg cac aat gga cag agc aat 192
Glu Asn Asn Gly Pro Phe Ser Gln Ile Met His Asn Gly Gln Ser Asn
50 55 60

acc ggg aca ggt gaa agc ttc ggc agc tac gct gcc ggc gac ggt ttt 240
Thr Gly Thr Gly Glu Ser Phe Gly Ser Tyr Ala Ala Gly Asp Gly Phe
65 70 75 80

ctg ggc ggt tct gtg tca ggg atg tat gga aac aac acc gga gag ggc 288
Leu Gly Gly Ser Val Ser Gly Met Tyr Gly Asn Asn Thr Gly Glu Gly
85 90 95

gcg tgt tct aaa aga ccg tcc gcg tgc cgt aaa cgc tcg gct gca cta 336
Ala Cys Ser Lys Arg Pro Ser Ala Cys Arg Lys Arg Ser Ala Ala Leu
100 105 110

att cac gcg gcg tcc gag gcg tct gtg gcc gag caa ggc acc tca cag 384
Ile His Ala Ala Ser Glu Ala Ser Val Ala Glu Gln Gly Thr Ser Gln
115 120 125

ggg gca cat gcc gta tct gac cgg ata ggc aga gac ggt ggc gct gac 432
Gly Ala His Ala Val Ser Asp Arg Ile Gly Arg Asp Gly Gly Ala Asp
130 135 140

aat aga cta ctc aag gtg agt gcg cgg ctg tcg gac aaa aca aag agc 480
Asn Arg Leu Leu Lys Val Ser Ala Arg Leu Ser Asp Lys Thr Lys Ser
145 150 155 160

gcc ctt cgc agc cat cct tgc ttg cgt tgc tat tct ttg atg ttt aac 528
Ala Leu Arg Ser His Pro Cys Leu Arg Cys Tyr Ser Leu Met Phe Asn
165 170 175

acg taa 534
Thr

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<210> 99
<211> 177
<212> PRT
<213> Macaca mulatta rhadinovirus 17577

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<400> 99
Met Pro Arg Val Lys Thr Gln Pro Lys Arg Pro Gln Val Leu Glu Phe
1 5 10 15
Met Pro Leu Asp Leu His Gly Gly Thr His Thr Glu Met Asp Ser Gln
20 25 30
Asn Leu Cys Pro Asp Gly Gln Asp Leu Leu Gly Ser Tyr Ile Tyr Thr
35 40 45
Glu Asn Asn Gly Pro Phe Ser Gln Ile Met His Asn Gly Gln Ser Asn

```



50		55		60	
Thr Gly Thr Gly Glu Ser Phe Gly Ser Tyr Ala Ala Gly Asp Gly Phe					
65		70		75	80
Leu Gly Gly Ser Val Ser Gly Met Tyr Gly Asn Asn Thr Gly Glu Gly					
	85		90		95
Ala Cys Ser Lys Arg Pro Ser Ala Cys Arg Lys Arg Ser Ala Ala Leu					
	100		105		110
Ile His Ala Ala Ser Glu Ala Ser Val Ala Glu Gln Gly Thr Ser Gln					
	115		120		125
Gly Ala His Ala Val Ser Asp Arg Ile Gly Arg Asp Gly Gly Ala Asp					
	130		135		140
Asn Arg Leu Leu Lys Val Ser Ala Arg Leu Ser Asp Lys Thr Lys Ser					
	145		150		155
Ala Leu Arg Ser His Pro Cys Leu Arg Cys Tyr Ser Leu Met Phe Asn					
	165		170		175
Thr					

<210> 100  
 <211> 693  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(693)

<400> 100	
atg gga ttt ggg aac ata cgt ctg gga tgg agg tta tgc ttc atg gtc	48
Met Gly Phe Gly Asn Ile Arg Leu Gly Trp Arg Leu Cys Phe Met Val	
1 5 10 15	
tgg gtg gcg tgg att gca cgg gga cgg tcg gtg tgc cca acc tgg cac	96
Trp Val Ala Trp Ile Ala Arg Gly Arg Ser Val Cys Pro Thr Trp His	
20 25 30	
ctg aca gat ggg aaa tac gag gcg gta tac agg cac tac ctc gaa gag	144
Leu Thr Asp Gly Lys Tyr Glu Ala Val Tyr Arg His Tyr Leu Glu Glu	
35 40 45	
tgc cgc aaa cat gaa ggc tcg ggg agc ctg gac ggt tcc gga cag aca	192
Cys Arg Lys His Glu Gly Ser Gly Ser Leu Asp Gly Ser Gly Gln Thr	
50 55 60	
aag ggg tct gga acc aaa gca acc acc gaa gct aat ata tcg ata aga	240
Lys Gly Ser Gly Thr Lys Ala Thr Thr Glu Ala Asn Ile Ser Ile Arg	
65 70 75 80	
cct aac gtt gtc aca tca ggt caa aat aaa gag ccg cct ggg aca gca	288
Pro Asn Val Val Thr Ser Gly Gln Asn Lys Glu Pro Pro Gly Thr Ala	
85 90 95	
ccg agg gcc gaa tca tca cac gac ctg cca cgc atc aag cag gtt aac	336
Pro Arg Ala Glu Ser Ser His Asp Leu Pro Arg Ile Lys Gln Val Asn	
100 105 110	
gct ctc cga tta tca acc ccg gaa ttg gcg caa cca ctc ccg gta gta	384
Ala Leu Arg Leu Ser Thr Pro Glu Leu Ala Gln Pro Leu Pro Val Val	
115 120 125	

aaa tcg act ccg cgc gag tca cag tca ggt ggg aca ccc tgg aac gcg 432  
 Lys Ser Thr Pro Arg Gln Ser Gly Gly Thr Pro Trp Asn Ala  
 130 135 140

cgc ccc cac gcg ttc att atg cac aca aac gac atg ctc aac cca tct 480  
 Arg Pro His Ala Phe Ile Met His Thr Asn Asp Met Leu Asn Pro Ser  
 145 150 155 160

gtg gtc ctg tct ttc aga gcc atc cgt gcg cgg tcc aca cgc gat acc 528  
 Val Val Leu Ser Phe Arg Ala Ile Arg Ala Arg Ser Thr Arg Asp Thr  
 165 170 175

gag cag tcc gtt cgc gat cgg aac acg gtc acg acc agc tat cgt acc 576  
 Glu Gln Ser Val Arg Asp Arg Asn Thr Val Thr Thr Ser Tyr Arg Thr  
 180 185 190

cct ggc cgc cct tcc ctc ttt caa gcc aga ccc tcg tct cac ggt gcg 624  
 Pro Gly Arg Pro Ser Leu Phe Gln Ala Arg Pro Ser Ser His Gly Ala  
 195 200 205

cgt cta ccc cct tcg ccc cga acg atg gca aga tac gcc gag tcg cga 672  
 Arg Leu Pro Pro Ser Pro Arg Thr Met Ala Arg Tyr Ala Glu Ser Arg  
 210 215 220

aca ata tgc gac caa aat tga 693  
 Thr Ile Cys Asp Gln Asn  
 225 230

<210> 101

<211> 230

<212> PRT

<213> Macaca mulatta rhadinovirus 17577

<400> 101

Met Gly Phe Gly Asn Ile Arg Leu Gly Trp Arg Leu Cys Phe Met Val  
 1 5 10 15  
 Trp Val Ala Trp Ile Ala Arg Gly Arg Ser Val Cys Pro Thr Trp His  
 20 25 30  
 Leu Thr Asp Gly Lys Tyr Glu Ala Val Tyr Arg His Tyr Leu Glu Glu  
 35 40 45  
 Cys Arg Lys His Glu Gly Ser Gly Ser Leu Asp Gly Ser Gly Gln Thr  
 50 55 60  
 Lys Gly Ser Gly Thr Lys Ala Thr Thr Glu Ala Asn Ile Ser Ile Arg  
 65 70 75 80  
 Pro Asn Val Val Thr Ser Gly Gln Asn Lys Glu Pro Pro Gly Thr Ala  
 85 90 95  
 Pro Arg Ala Glu Ser Ser His Asp Leu Pro Arg Ile Lys Gln Val Asn  
 100 105 110  
 Ala Leu Arg Leu Ser Thr Pro Glu Leu Ala Gln Pro Leu Pro Val Val  
 115 120 125  
 Lys Ser Thr Pro Arg Glu Ser Gln Ser Gly Gly Thr Pro Trp Asn Ala  
 130 135 140  
 Arg Pro His Ala Phe Ile Met His Thr Asn Asp Met Leu Asn Pro Ser  
 145 150 155 160  
 Val Val Leu Ser Phe Arg Ala Ile Arg Ala Arg Ser Thr Arg Asp Thr  
 165 170 175  
 Glu Gln Ser Val Arg Asp Arg Asn Thr Val Thr Thr Ser Tyr Arg Thr  
 180 185 190  
 Pro Gly Arg Pro Ser Leu Phe Gln Ala Arg Pro Ser Ser His Gly Ala  
 195 200 205

Arg Leu Pro Pro Ser Pro Arg Thr Met Ala Arg Tyr Ala Glu Ser Arg  
 210 215 220  
 Thr Ile Cys Asp Gln Asn  
 225 230

<210> 102  
 <211> 420  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(420)

<400> 102  
 atg tct tcc acg cgt ccc aag acg cgc gcc ccc aaa aaa gag ctg aca 48  
 Met Ser Ser Thr Arg Pro Lys Thr Arg Ala Pro Lys Lys Glu Leu Thr  
 1 5 10 15  
 atg gag gag tta gcc gct cag gtg caa aaa ttg tcc gtt gaa aac aag 96  
 Met Glu Glu Leu Ala Ala Gln Val Gln Lys Leu Ser Val Glu Asn Lys  
 20 25 30  
 cag ctc aaa aag ctg ata aat tct ggg gat ccc acc agg tcc ggc tcc 144  
 Gln Leu Lys Lys Leu Ile Asn Ser Gly Asp Pro Thr Arg Ser Gly Ser  
 35 40 45  
 gac ccc gtc atc tct aac acc gaa aag gag gcc aaa atc gca gct gcc 192  
 Asp Pro Val Ile Ser Asn Thr Glu Lys Glu Ala Lys Ile Ala Ala Ala  
 50 55 60  
 gtt tcg gcc tta tgt aac gtg gca acc cgt aag att gaa gct aag gtg 240  
 Val Ser Ala Leu Cys Asn Val Ala Thr Arg Lys Ile Glu Ala Lys Val  
 65 70 75 80  
 agg gcg gcc acg gcc aag gcc gtg acg cgc ggg cag atg gaa gac gcc 288  
 Arg Ala Ala Thr Ala Lys Ala Val Thr Arg Gly Gln Met Glu Asp Ala  
 85 90 95  
 ctc gcc gga att agt atc cgc gtg gac gtg tca atg gac gag acc acc 336  
 Leu Ala Gly Ile Ser Ile Arg Val Asp Val Ser Met Asp Glu Thr Thr  
 100 105 110  
 aga ggc gga atc gct gcc agc gcg gac ggg gcg ctc agg agg agg cgc 384  
 Arg Gly Gly Ile Ala Ala Ser Ala Asp Gly Ala Leu Arg Arg Arg Arg  
 115 120 125  
 gcc cag tcc agg acc aga aat aac gac gcg gac tag 420  
 Ala Gln Ser Arg Thr Arg Asn Asn Asp Ala Asp  
 130 135 140

<210> 103  
 <211> 139  
 <212> PRT  
 <213> Macaca mulatta rhadinovirus 17577

<400> 103  
 Met Ser Ser Thr Arg Pro Lys Thr Arg Ala Pro Lys Lys Glu Leu Thr

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      1             5             10             15
Met Glu Glu Leu Ala Ala Gln Val Gln Lys Leu Ser Val Glu Asn Lys
      20             25             30
Gln Leu Lys Lys Leu Ile Asn Ser Gly Asp Pro Thr Arg Ser Gly Ser
      35             40             45
Asp Pro Val Ile Ser Asn Thr Glu Lys Glu Ala Lys Ile Ala Ala Ala
      50             55             60
Val Ser Ala Leu Cys Asn Val Ala Thr Arg Lys Ile Glu Ala Lys Val
      65             70             75             80
Arg Ala Ala Thr Ala Lys Ala Val Thr Arg Gly Gln Met Glu Asp Ala
      85             90             95
Leu Ala Gly Ile Ser Ile Arg Val Asp Val Ser Met Asp Glu Thr Thr
      100             105             110
Arg Gly Gly Ile Ala Ala Ser Ala Asp Gly Ala Leu Arg Arg Arg Arg
      115             120             125
Ala Gln Ser Arg Thr Arg Asn Asn Asp Ala Asp
      130             135

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<210> 104
<211> 315
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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<220>
<221> CDS
<222> (1)..(315)

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<400> 104
atg aca ggg tca att gtg ctc gcg tta gcc ctg ttg gcg tgc tta tat 48
Met Thr Gly Ser Ile Val Leu Ala Leu Ala Leu Leu Ala Cys Leu Tyr
      1             5             10             15

ctg tgt ctg ccg gtg tgc gcc acc gtc acc acc tcc tcg act aca gga 96
Leu Cys Leu Pro Val Cys Ala Thr Val Thr Thr Ser Ser Thr Thr Gly
      20             25             30

acg ggc acg cct cct gtg act aca aac ccc tcc gcg gct ccc tcc gta 144
Thr Gly Thr Pro Pro Val Thr Thr Asn Pro Ser Ala Ala Pro Ser Val
      35             40             45

acg ccc tct ttt tat gac tat gat tgc tcg gcg gac acg tac cag ccc 192
Thr Pro Ser Phe Tyr Asp Tyr Asp Cys Ser Ala Asp Thr Tyr Gln Pro
      50             55             60

gtg ctg tct agt ttt tcg agt ata tgg gcg gtg atc aac tct gtt ctg 240
Val Leu Ser Ser Phe Ser Ser Ile Trp Ala Val Ile Asn Ser Val Leu
      65             70             75             80

gtc gcg gtt gca aca ttt ctg tac cta aca tat atg tgc ttt ttt aaa 288
Val Ala Val Ala Thr Phe Leu Tyr Leu Thr Tyr Met Cys Phe Phe Lys
      85             90             95

ttt gtt gaa acc gtg gcg cac gag tga 315
Phe Val Glu Thr Val Ala His Glu
      100             105

```

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<210> 105
<211> 104

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&lt;212&gt; PRT

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 105

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Met Thr Gly Ser Ile Val Leu Ala Leu Ala Leu Leu Ala Cys Leu Tyr
 1           5           10           15
Leu Cys Leu Pro Val Cys Ala Thr Val Thr Thr Ser Ser Thr Thr Gly
          20           25           30
Thr Gly Thr Pro Pro Val Thr Thr Asn Pro Ser Ala Ala Pro Ser Val
          35           40           45
Thr Pro Ser Phe Tyr Asp Tyr Asp Cys Ser Ala Asp Thr Tyr Gln Pro
          50           55           60
Val Leu Ser Ser Phe Ser Ser Ile Trp Ala Val Ile Asn Ser Val Leu
          65           70           75           80
Val Ala Val Ala Thr Phe Leu Tyr Leu Thr Tyr Met Cys Phe Phe Lys
          85           90           95
Phe Val Glu Thr Val Ala His Glu
          100

```

&lt;210&gt; 106

&lt;211&gt; 873

&lt;212&gt; DNA

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(873)

&lt;400&gt; 106

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atg gca gaa gtg acc gcc cat acg gtt ccg tac gcc ttt gac tcc tgt      48
Met Ala Glu Val Thr Ala His Thr Val Pro Tyr Ala Phe Asp Ser Cys
 1           5           10           15

aag ttt gaa ata ata cca aaa aac aac tca tct cgt ata gcg tta cgc      96
Lys Phe Glu Ile Ile Pro Lys Asn Asn Ser Ser Arg Ile Ala Leu Arg
          20           25           30

aac aaa ttt ccc gtc gtg gtc aaa ccg gga gaa cct cta gtc gtg ccc      144
Asn Lys Phe Pro Val Val Val Lys Pro Gly Glu Pro Leu Val Val Pro
          35           40           45

ctg gga cta aaa att atc cgc gcg ccc cag tgc gca ttc ttt ctc agc      192
Leu Gly Leu Lys Ile Ile Arg Ala Pro Gln Cys Ala Phe Phe Leu Ser
          50           55           60

gga gcg ccg acg gat gag gtg tat tac cac acc gga ctt ata gat caa      240
Gly Ala Pro Thr Asp Glu Val Tyr Tyr His Thr Gly Leu Ile Asp Gln
          65           70           75           80

ggg tat cgt gga gaa ata aaa ctc atc gtt ctc aat aag act aaa cag      288
Gly Tyr Arg Gly Glu Ile Lys Leu Ile Val Leu Asn Lys Thr Lys Gln
          85           90           95

gtc gtc aca ctt tac ccg gga gaa gtc aac gtc tca ctc atc gcg ttt      336
Val Val Thr Leu Tyr Arg Gly Glu Val Asn Val Ser Leu Ile Ala Phe
          100           105           110

atg tac gcc tcg ccc ggg ccc cta aaa tgc ccg ata ctg aac cta cca      384
Met Tyr Ala Ser Pro Gly Pro Leu Lys Cys Pro Ile Leu Asn Leu Pro

```

115	120	125	
cat tac tct ctg gac gct gga ttt gat gtt acg tcg cca cat gcc atg			432
His Tyr Ser Leu Asp Ala Gly Phe Asp Val Thr Ser Pro His Ala Met			
130	135	140	
acc ata ccc cca acc gac aga acc ccg ttt acg ttg agt ttg tat tat			480
Thr Ile Pro Pro Thr Asp Arg Thr Pro Phe Thr Leu Ser Leu Tyr Tyr			
145	150	155	160
aag agt cca cag ctc agc acc ccc cac gtc cca cta atc gtg ggg cgc			528
Lys Ser Pro Gln Leu Ser Thr Pro His Val Pro Leu Ile Val Gly Arg			
165	170	175	
tct gga ctg gcg aca aag ggg ctt acc gtc gac gcg acc aaa tgg acc			576
Ser Gly Leu Ala Thr Lys Gly Leu Thr Val Asp Ala Thr Lys Trp Thr			
180	185	190	
cag tcg ttg gta cat ctg agg ttt tat aac ttt acc aaa gag cca ata			624
Gln Ser Leu Val His Leu Arg Phe Tyr Asn Phe Thr Lys Glu Pro Ile			
195	200	205	
gat ata cca gca aac agc cgc ata tgt cag gta gtg ttt atc cac gaa			672
Asp Ile Pro Ala Asn Ser Arg Ile Cys Gln Val Val Phe Ile His Glu			
210	215	220	
gac cac gtc cca agc ggg tgg aac att ctt aga tcc cgc gta caa ctc			720
Asp His Val Pro Ser Gly Trp Asn Ile Leu Arg Ser Arg Val Gln Leu			
225	230	235	240
ggc agc acc ctc cag ata tcg tgg gcc aaa atc agg ttt acc gac gtg			768
Gly Ser Thr Leu Gln Ile Ser Trp Ala Lys Ile Arg Phe Thr Asp Val			
245	250	255	
gcc acg ctc ccc aaa acc cac ccg ctc aac tcc cgc cac act caa agc			816
Ala Thr Leu Pro Lys Thr His Pro Leu Asn Ser Arg His Thr Gln Ser			
260	265	270	
caa acc gaa ccg gag acc gcc cgc ggc gca aag ggg ttg ggg tcg tca			864
Gln Thr Glu Pro Glu Thr Ala Arg Gly Ala Lys Gly Leu Gly Ser Ser			
275	280	285	
ggg tta taa			873
Gly Leu			
290			

&lt;210&gt; 107

&lt;211&gt; 290

&lt;212&gt; PRT

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 107

Met	Ala	Glu	Val	Thr	Ala	His	Thr	Val	Pro	Tyr	Ala	Phe	Asp	Ser	Cys
1				5				10					15		
Lys	Phe	Glu	Ile	Ile	Pro	Lys	Asn	Asn	Ser	Ser	Arg	Ile	Ala	Leu	Arg
		20					25				30				
Asn	Lys	Phe	Pro	Val	Val	Val	Lys	Pro	Gly	Glu	Pro	Leu	Val	Val	Pro
	35					40				45					
Leu	Gly	Leu	Lys	Ile	Ile	Arg	Ala	Pro	Gln	Cys	Ala	Phe	Phe	Leu	Ser
	50				55				60						

Gly Ala Pro Thr Asp Glu Val Tyr Tyr His Thr Gly Leu Ile Asp Gln  
 65 70 75 80  
 Gly Tyr Arg Gly Glu Ile Lys Leu Ile Val Leu Asn Lys Thr Lys Gln  
 85 90 95  
 Val Val Thr Leu Tyr Arg Gly Glu Val Asn Val Ser Leu Ile Ala Phe  
 100 105 110  
 Met Tyr Ala Ser Pro Gly Pro Leu Lys Cys Pro Ile Leu Asn Leu Pro  
 115 120 125  
 His Tyr Ser Leu Asp Ala Gly Phe Asp Val Thr Ser Pro His Ala Met  
 130 135 140  
 Thr Ile Pro Pro Thr Asp Arg Thr Pro Phe Thr Leu Ser Leu Tyr Tyr  
 145 150 155 160  
 Lys Ser Pro Gln Leu Ser Thr Pro His Val Pro Leu Ile Val Gly Arg  
 165 170 175  
 Ser Gly Leu Ala Thr Lys Gly Leu Thr Val Asp Ala Thr Lys Trp Thr  
 180 185 190  
 Gln Ser Leu Val His Leu Arg Phe Tyr Asn Phe Thr Lys Glu Pro Ile  
 195 200 205  
 Asp Ile Pro Ala Asn Ser Arg Ile Cys Gln Val Val Phe Ile His Glu  
 210 215 220  
 Asp His Val Pro Ser Gly Trp Asn Ile Leu Arg Ser Arg Val Gln Leu  
 225 230 235 240  
 Gly Ser Thr Leu Gln Ile Ser Trp Ala Lys Ile Arg Phe Thr Asp Val  
 245 250 255  
 Ala Thr Leu Pro Lys Thr His Pro Leu Asn Ser Arg His Thr Gln Ser  
 260 265 270  
 Gln Thr Glu Pro Glu Thr Ala Arg Gly Ala Lys Gly Leu Gly Ser Ser  
 275 280 285  
 Gly Leu  
 290

<210> 108  
 <211> 633  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(633)

<400> 108  
 atg gcc gcg cct ggt tcg ttt tgg acg tgt tgc ggg ttt agt ccg ttt 48  
 Met Ala Ala Pro Gly Ser Phe Trp Thr Cys Cys Gly Phe Ser Pro Phe  
 1 5 10 15  
 gga cgc gtg gga tgt caa tat cgt ccc ctg cca gat cct ctt aac gag 96  
 Gly Arg Val Gly Cys Gln Tyr Arg Pro Leu Pro Asp Pro Leu Asn Glu  
 20 25 30  
 tgt cct act cac tgg cgg acc gaa ata gcc atg ggt ctg ccc ccg gga 144  
 Cys Pro Thr His Trp Arg Thr Glu Ile Ala Met Gly Leu Pro Pro Gly  
 35 40 45  
 gtg gat atg gga gat gtg aag cag gca gag atg tgc acc gcc gcc ctt 192  
 Val Asp Met Gly Asp Val Lys Gln Ala Glu Met Cys Thr Ala Ala Leu  
 50 55 60  
 cgg cag acg tat ctg ttg gcc gtt caa tcc aat aaa ata acc gag tat 240  
 Arg Gln Thr Tyr Leu Leu Ala Val Gln Ser Asn Lys Ile Thr Glu Tyr

65	70	75	80	
ctt cgt cgt ttt gac gcg gct agg gta ccc gcg ggg tgc cag gag acg				288
Leu Arg Arg Phe Asp Ala Ala Arg Val Pro Ala Gly Cys Gln Glu Thr	85	90	95	
gtt agg att caa ata tct aag cta aag tct ata cag aac gtt atc tgg				336
Val Arg Ile Gln Ile Ser Lys Leu Lys Ser Ile Gln Asn Val Ile Trp	100	105	110	
aac gcc atg ttg tcc ctg gct ata ggg gat att acg gtg gac gag agc				384
Asn Ala Met Leu Ser Leu Ala Ile Gly Asp Ile Thr Val Asp Glu Ser	115	120	125	
gcc ttt cac gcg ctt ttg aat aaa cgg gcc gac gag acc gtg tca ctc				432
Ala Phe His Ala Leu Leu Asn Lys Arg Ala Asp Glu Thr Val Ser Leu	130	135	140	
ctg gaa atg gaa aaa ctg gct acg acg atc gcg tcc gat gat tct gtc				480
Leu Glu Met Glu Lys Leu Ala Thr Thr Ile Ala Ser Asp Asp Ser Val	145	150	155	160
acg tgg gct gcg gaa att aat aat gtg ctg gta gac acc gaa gcg tcc				528
Thr Trp Ala Ala Glu Ile Asn Asn Val Leu Val Asp Thr Glu Ala Ser	165	170	175	
tcc aac ccc tcc cat ccg gtg att cga caa ccg acg ccc cag ttg gcg				576
Ser Asn Pro Ser His Pro Val Ile Arg Gln Pro Thr Pro Gln Leu Ala	180	185	190	
gtg gcg gat aat atc gtg cca gac aaa ata ata cag gat gcg caa gct				624
Val Ala Asp Asn Ile Val Pro Asp Lys Ile Ile Gln Asp Ala Gln Ala	195	200	205	
gat ggt taa				633
Asp Gly				
210				

&lt;210&gt; 109

&lt;211&gt; 210

&lt;212&gt; PRT

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 109

Met Ala Ala Pro Gly Ser Phe Trp Thr Cys Cys Gly Phe Ser Pro Phe																			
1				5				10					15						
Gly Arg Val Gly Cys Gln Tyr Arg Pro Leu Pro Asp Pro Leu Asn Glu																			
			20					25					30						
Cys Pro Thr His Trp Arg Thr Glu Ile Ala Met Gly Leu Pro Pro Gly																			
			35				40					45							
Val Asp Met Gly Asp Val Lys Gln Ala Glu Met Cys Thr Ala Ala Leu																			
			50			55					60								
Arg Gln Thr Tyr Leu Leu Ala Val Gln Ser Asn Lys Ile Thr Glu Tyr																			
			65		70			75											
Leu Arg Arg Phe Asp Ala Ala Arg Val Pro Ala Gly Cys Gln Glu Thr																			
				85				90											
Val Arg Ile Gln Ile Ser Lys Leu Lys Ser Ile Gln Asn Val Ile Trp																			
			100				105						110						
Asn Ala Met Leu Ser Leu Ala Ile Gly Asp Ile Thr Val Asp Glu Ser																			
			115				120						125						



Ala Phe His Ala Leu Leu Asn Lys Arg Ala Asp Glu Thr Val Ser Leu  
 130 135 140  
 Leu Glu Met Glu Lys Leu Ala Thr Thr Ile Ala Ser Asp Asp Ser Val  
 145 150 155 160  
 Thr Trp Ala Ala Glu Ile Asn Asn Val Leu Val Asp Thr Glu Ala Ser  
 165 170 175  
 Ser Asn Pro Ser His Pro Val Ile Arg Gln Pro Thr Pro Gln Leu Ala  
 180 185 190  
 Val Ala Asp Asn Ile Val Pro Asp Lys Ile Ile Gln Asp Ala Gln Ala  
 195 200 205  
 Asp Gly  
 210

<210> 110  
 <211> 2487  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1).. (2487)

<400> 110  
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 Met Val Asp Glu Ile Arg Ala Ile Phe Ser Thr Ser Gly Asp Met Ala  
 1 5 10 15  
 gaa gta att acg gat ata ctg act gaa acg caa gca acg gcg tcc ttc 96  
 Glu Val Ile Thr Asp Ile Leu Thr Glu Thr Gln Ala Thr Ala Ser Phe  
 20 25 30  
 ttc tgc gtg ctc cac gat cgg ggc gac gcg cct ata aat act cca cat 144  
 Phe Cys Val Leu His Asp Arg Gly Asp Ala Pro Ile Asn Thr Pro His  
 35 40 45  
 gcc gta att aaa ctc tgc ctg ccc gcc aag cgc cca ggc ggc ggg cca 192  
 Ala Val Ile Lys Leu Cys Leu Pro Ala Lys Arg Pro Gly Gly Gly Pro  
 50 55 60  
 agg tgt tta ccg ttg atg gtg ctg aac cta ccg gcg tgg cag gtt aat 240  
 Arg Cys Leu Pro Leu Met Val Leu Asn Leu Pro Ala Trp Gln Val Asn  
 65 70 75 80  
 cta ttc cta aca ggt gac gca cca ttg acc tcg gat aac att aaa gac 288  
 Leu Phe Leu Thr Gly Asp Ala Pro Leu Thr Ser Asp Asn Ile Lys Asp  
 85 90 95  
 cgc att gac ctg gct cag acc gag gaa ata ctc gaa ccc ata tta agc 336  
 Arg Ile Asp Leu Ala Gln Thr Glu Glu Ile Leu Glu Pro Ile Leu Ser  
 100 105 110  
 gta ctg gca tgc aaa cgg tcc gcg cag cag acc aaa cat gac tcg ttt 384  
 Val Leu Ala Cys Lys Arg Ser Ala Gln Gln Thr Lys His Asp Ser Phe  
 115 120 125  
 aaa tct aag gtg gcc tgg ttc agg gca aag ttc gtc tcg gcc cta aga 432  
 Lys Ser Lys Val Ala Trp Phe Arg Ala Lys Phe Val Ser Ala Leu Arg  
 130 135 140

aaa gtg tac	aaa atg acc	cca tcc ccc	tat tgg atg	ata acg ctg	ctg	480
Lys Val Tyr	Lys Met Thr	Pro Ser Pro	Tyr Trp Met	Ile Thr Leu	Leu	
145	150		155		160	
ggc tcg ttc	gag gca tcg	ttt gta ctg	gcc ggc acg	ttt tat ttt	ttc	528
Gly Ser Phe	Glu Ala Ser	Phe Val Leu	Ala Gly Thr	Phe Tyr Phe	Phe	
	165		170		175	
cag tct cat	ata tgc acg	gcg gag acg	ctg gtg cat	cta acg agg	tta	576
Gln Ser His	Ile Cys Thr	Ala Glu Thr	Leu Val His	Leu Thr Arg	Leu	
	180		185		190	
ttc agc tcc	agt cag ggc	cag agc ttg	gtc acc gta	aac acc tat	gac	624
Phe Ser Ser	Ser Gln Gly	Gln Ser Leu	Val Thr Val	Asn Thr Tyr	Asp	
	195		200		205	
gaa tta ggg	cgc gta ttc	ggg cgg tca	gat ttc ctt	gga att gtt	cca	672
Glu Leu Gly	Arg Val Phe	Gly Arg Ser	Asp Phe Leu	Gly Ile Val	Pro	
	210		215		220	
aat ttt tgg	gcg tat cta	aaa tac aaa	atg caa cag	gac gac gtg	gag	720
Asn Phe Trp	Ala Tyr Leu	Lys Tyr Lys	Met Gln Gln	Asp Asp Val	Glu	
	225		230		240	
tcc agg gcc	atc gat caa	aca atc aac	tcc ata cgt	ggg ggg ttg	atg	768
Ser Arg Ala	Ile Asp Gln	Thr Ile Asn	Ser Ile Arg	Gly Gly Leu	Met	
	245		250		255	
ctg tca cct	cag gac ctc	gta cac ttc	atc tac ctg	tca ttt tac	gag	816
Leu Ser Pro	Gln Asp Leu	Val His Phe	Ile Tyr Leu	Ser Phe Tyr	Glu	
	260		265		270	
tgc atg aac	gca cag acg	ttc ctg tcg	tac tct cgt	acc acg tcc	agt	864
Cys Met Asn	Ala Gln Thr	Phe Leu Ser	Tyr Ser Arg	Thr Thr Ser	Ser	
	275		280		285	
tta ccg acc	ccc gca acg	gtt aac cct	ccg cag ctg	tgt cgg cgc	tta	912
Leu Pro Thr	Pro Ala Thr	Val Asn Pro	Pro Gln Leu	Cys Arg Arg	Leu	
	290		295		300	
gaa gcg gat	ttt aag gag	cac gtg atg	gca tat tac	aat aaa gca	agc	960
Glu Ala Asp	Phe Lys Glu	His Val Met	Ala Tyr Tyr	Asn Lys Ala	Ser	
	305		310		320	
tac ctg agt	act tac ata	acc att tta	acc gta ccc	gct cct ctc	ccg	1008
Tyr Leu Ser	Thr Tyr Ile	Thr Ile Leu	Thr Val Pro	Ala Pro Leu	Pro	
	325		330		335	
gac gga tac	gaa aac ttt	cag gaa cta	gca tgt caa	tac tgg tgt	gga	1056
Asp Gly Tyr	Glu Asn Phe	Gln Glu Leu	Ala Cys Gln	Tyr Trp Cys	Gly	
	340		345		350	
caa tcg aga	gac gtg gcg	gaa atc atg	act aga att	aat gac cag	tat	1104
Gln Ser Arg	Asp Val Ala	Glu Ile Met	Thr Arg Ile	Asn Asp Gln	Tyr	
	355		360		365	
cca cag ctg	aat cta aca	aaa gat tta	tcc ggt ctc	ctt gac cta	gcg	1152
Pro Gln Leu	Asn Leu Thr	Lys Asp Leu	Ser Gly Leu	Leu Asp Leu	Ala	
	370		375		380	
gcc cta gat	cag tat tcc	gga ggc ccc	aag gaa aac	ctt ttt acg	gtg	1200

Ala	Leu	Asp	Gln	Tyr	Ser	Gly	Gly	Pro	Lys	Glu	Asn	Leu	Phe	Thr	Val		
385					390					395					400		
gct	tcg	aga	att	ccc	aca	tac	agg	tgc	gag	ttt	ttg	aat	aaa	cag	tat	1248	
Ala	Ser	Arg	Ile	Pro	Thr	Tyr	Arg	Cys	Glu	Phe	Leu	Asn	Lys	Gln	Tyr		
			405					410					415				
ttt	gtt	cta	atg	cac	gca	gac	tgt	ata	gac	gcg	tac	tggt	aaa	caa	aac	1296	
Phe	Val	Leu	Met	His	Ala	Asp	Cys	Ile	Asp	Ala	Tyr	Trp	Lys	Gln	Asn		
			420				425						430				
att	atc	gtg	ccc	gaa	gac	gcc	caa	ttg	caa	ggc	ctg	acg	gat	caa	gat	1344	
Ile	Ile	Val	Pro	Glu	Asp	Ala	Gln	Leu	Gln	Gly	Leu	Thr	Asp	Gln	Asp		
		435				440						445					
ctc	acc	tcc	agg	ata	ttt	tac	tgc	gac	ctc	ggc	cta	tct	cta	cct	aca	1392	
Leu	Thr	Ser	Arg	Ile	Phe	Tyr	Cys	Asp	Leu	Gly	Leu	Ser	Leu	Pro	Thr		
	450				455						460						
ttt	aaa	caa	caa	att	cta	gtt	tca	cgc	cac	gag	tat	ttc	aac	cca	cga	1440	
Phe	Lys	Gln	Gln	Ile	Leu	Val	Ser	Arg	His	Glu	Tyr	Phe	Asn	Pro	Arg		
465				470				475						480			
ctc	cca	gtt	tat	aga	tgg	gtg	ttg	gat	ttt	gat	cta	aag	gta	acc	gaa	1488	
Leu	Pro	Val	Tyr	Arg	Trp	Val	Leu	Asp	Phe	Asp	Leu	Lys	Val	Thr	Glu		
			485					490					495				
ggg	aga	cgg	act	cta	aac	gat	atc	tac	aac	ata	tgc	gta	acg	ctg	cgg	1536	
Gly	Arg	Arg	Thr	Leu	Asn	Asp	Ile	Tyr	Asn	Ile	Cys	Val	Thr	Leu	Arg		
		500					505					510					
cag	gtc	ata	tta	gaa	acg	ttg	cag	tta	ata	ggg	cca	cta	aaa	ccg	aac	1584	
Gln	Val	Ile	Leu	Glu	Thr	Leu	Gln	Leu	Ile	Gly	Pro	Leu	Lys	Pro	Asn		
	515					520					525						
cac	ccc	gtg	tat	ttt	ttt	aag	tcg	gcc	tgt	cca	gcc	gta	acc	tggt	ccg	1632	
His	Pro	Val	Tyr	Phe	Phe	Lys	Ser	Ala	Cys	Pro	Ala	Val	Thr	Trp	Pro		
	530				535						540						
gat	gat	atc	tca	gac	acc	gcg	ttc	tgt	cac	tgt	gac	gca	aaa	ata	ggg	1680	
Asp	Asp	Ile	Ser	Asp	Thr	Ala	Phe	Cys	His	Cys	Asp	Ala	Lys	Ile	Gly		
545				550						555				560			
atg	aga	att	gta	acc	ccg	ttt	ccg	agc	gga	tac	tgt	ttg	gtg	ggg	tcc	1728	
Met	Arg	Ile	Val	Thr	Pro	Phe	Pro	Ser	Gly	Tyr	Cys	Leu	Val	Gly	Ser		
			565					570					575				
gct	cca	ctc	gtg	tcc	ctg	acc	gac	att	tta	aac	cgc	gtg	gtt	aaa	ctg	1776	
Ala	Pro	Leu	Val	Ser	Leu	Thr	Asp	Ile	Leu	Asn	Arg	Val	Val	Lys	Leu		
		580					585						590				
gac	acg	cgg	cta	gcc	tca	gag	tat	cct	ggg	atc	tta	gaa	gat	aaa	gga	1824	
Asp	Thr	Arg	Leu	Ala	Ser	Glu	Tyr	Pro	Gly	Ile	Leu	Glu	Asp	Lys	Gly		
		595				600						605					
cca	ttt	gac	tct	ggc	att	tac	gcc	aag	ggg	cga	tgc	gtg	cgc	gta	cct	1872	
Pro	Phe	Asp	Ser	Gly	Ile	Tyr	Ala	Lys	Gly	Arg	Cys	Val	Arg	Val	Pro		
	610				615						620						
cac	tgc	tat	aag	gtt	ggc	ccg	ggg	ggc	gag	ctg	tca	cgg	ctc	cta	aaa	1920	
His	Cys	Tyr	Lys	Val	Gly	Pro	Gly	Gly	Glu	Leu	Ser	Arg	Leu	Leu	Lys		

625	630	635	640	
att att atc tgt cac	ccc gaa gag tca	gat aaa tcg gcg tat	ttg aaa	1968
Ile Ile Ile Cys His	Pro Glu Glu Ser	Asp Lys Ser Ala Tyr	Leu Lys	
	645	650	655	
aac gcg ttt aag gtt tct	aat ctg cta cat	cac gcc cct gga gac	tct	2016
Asn Ala Phe Lys Val	Ser Asn Leu Leu	His His Ala Pro	Gly Asp Ser	
	660	665	670	
gtc acc aaa aac ggc	cac ctg gtg tac	gcg atc act gac	gaa aac gag	2064
Val Thr Lys Asn Gly	His Leu Val Tyr	Ala Ile Thr Asp	Glu Asn Glu	
	675	680	685	
ggc ttt cta gaa agc	aaa acc aag aat	aat ctt ccc aaa	aca atc acg	2112
Gly Phe Leu Glu Ser	Lys Thr Lys Asn	Asn Leu Pro Lys	Thr Ile Thr	
	690	695	700	
gac ctg gcc gaa aaa	att gag cga acc	aca gaa aaa cca	cta att gat	2160
Asp Leu Ala Glu Lys	Ile Glu Arg Thr	Thr Glu Lys Pro	Leu Ile Asp	
	705	710	715	720
tgg gca gcg acc gca	gtg tgg cca aaa	cta cac gat acc	ata cag cgt	2208
Trp Ala Ala Thr	Ala Val Trp Pro	Lys Leu His Asp	Thr Ile Gln Arg	
	725	730	735	
ttc ttt ccg gat gac	cgc atc ggc caa	ttt gca tct gtg	agc ttc atg	2256
Phe Phe Pro Asp Asp	Arg Ile Gly Gln	Phe Ala Ser Val	Ser Phe Met	
	740	745	750	
cac tcc gga gac aac	att ata caa gtt	aaa cca caa aaa	gga aac aac	2304
His Ser Gly Asp Asn	Ile Ile Gln Val	Lys Pro Gln Lys	Gly Asn Asn	
	755	760	765	
ttt ttc tgt att aat	cat aag cac cga	aac cac act cag	aca gtc cgt	2352
Phe Phe Cys Ile Asn	His Lys His Arg	Asn His Thr Gln	Thr Val Arg	
	770	775	780	
gta ttt tta acc cta	cat tcc aca aaa	gaa agc gag gtc	acg gtg acc	2400
Val Phe Leu Thr Leu	His Ser Thr Lys	Glu Ser Glu Val	Thr Val Thr	
	785	790	795	800
ttt atg agt cag tgc	ttt gct gca aaa	tgt aat cat aat	agc cca act	2448
Phe Met Ser Gln Cys	Phe Ala Ala Lys	Cys Asn His Asn	Ser Pro Thr	
	805	810	815	
gca cat ttt tca ttt	atg gta ccc ata	acc ggc acg taa		2487
Ala His Phe Ser Phe	Met Val Pro Ile	Thr Gly Thr		
	820	825		

&lt;210&gt; 111

&lt;211&gt; 828

&lt;212&gt; PRT

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 111

Met Val Asp Glu Ile Arg Ala Ile Phe Ser Thr Ser Gly Asp Met Ala	
1 5 10 15	
Glu Val Ile Thr Asp Ile Leu Thr Glu Thr Gln Ala Thr Ala Ser Phe	
20 25 30	

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Phe Cys Val Leu His Asp Arg Gly Asp Ala Pro Ile Asn Thr Pro His
      35              40              45
Ala Val Ile Lys Leu Cys Leu Pro Ala Lys Arg Pro Gly Gly Gly Pro
      50              55              60
Arg Cys Leu Pro Leu Met Val Leu Asn Leu Pro Ala Trp Gln Val Asn
      65              70              75              80
Leu Phe Leu Thr Gly Asp Ala Pro Leu Thr Ser Asp Asn Ile Lys Asp
      85              90              95
Arg Ile Asp Leu Ala Gln Thr Glu Glu Ile Leu Glu Pro Ile Leu Ser
      100             105             110
Val Leu Ala Cys Lys Arg Ser Ala Gln Gln Thr Lys His Asp Ser Phe
      115             120             125
Lys Ser Lys Val Ala Trp Phe Arg Ala Lys Phe Val Ser Ala Leu Arg
      130             135             140
Lys Val Tyr Lys Met Thr Pro Ser Pro Tyr Trp Met Ile Thr Leu Leu
      145             150             155             160
Gly Ser Phe Glu Ala Ser Phe Val Leu Ala Gly Thr Phe Tyr Phe Phe
      165             170             175
Gln Ser His Ile Cys Thr Ala Glu Thr Leu Val His Leu Thr Arg Leu
      180             185             190
Phe Ser Ser Ser Gln Gly Gln Ser Leu Val Thr Val Asn Thr Tyr Asp
      195             200             205
Glu Leu Gly Arg Val Phe Gly Arg Ser Asp Phe Leu Gly Ile Val Pro
      210             215             220
Asn Phe Trp Ala Tyr Leu Lys Tyr Lys Met Gln Gln Asp Asp Val Glu
      225             230             235             240
Ser Arg Ala Ile Asp Gln Thr Ile Asn Ser Ile Arg Gly Gly Leu Met
      245             250             255
Leu Ser Pro Gln Asp Leu Val His Phe Ile Tyr Leu Ser Phe Tyr Glu
      260             265             270
Cys Met Asn Ala Gln Thr Phe Leu Ser Tyr Ser Arg Thr Thr Ser Ser
      275             280             285
Leu Pro Thr Pro Ala Thr Val Asn Pro Pro Gln Leu Cys Arg Arg Leu
      290             295             300
Glu Ala Asp Phe Lys Glu His Val Met Ala Tyr Tyr Asn Lys Ala Ser
      305             310             315             320
Tyr Leu Ser Thr Tyr Ile Thr Ile Leu Thr Val Pro Ala Pro Leu Pro
      325             330             335
Asp Gly Tyr Glu Asn Phe Gln Glu Leu Ala Cys Gln Tyr Trp Cys Gly
      340             345             350
Gln Ser Arg Asp Val Ala Glu Ile Met Thr Arg Ile Asn Asp Gln Tyr
      355             360             365
Pro Gln Leu Asn Leu Thr Lys Asp Leu Ser Gly Leu Leu Asp Leu Ala
      370             375             380
Ala Leu Asp Gln Tyr Ser Gly Gly Pro Lys Glu Asn Leu Phe Thr Val
      385             390             395             400
Ala Ser Arg Ile Pro Thr Tyr Arg Cys Glu Phe Leu Asn Lys Gln Tyr
      405             410             415
Phe Val Leu Met His Ala Asp Cys Ile Asp Ala Tyr Trp Lys Gln Asn
      420             425             430
Ile Ile Val Pro Glu Asp Ala Gln Leu Gln Gly Leu Thr Asp Gln Asp
      435             440             445
Leu Thr Ser Arg Ile Phe Tyr Cys Asp Leu Gly Leu Ser Leu Pro Thr
      450             455             460
Phe Lys Gln Gln Ile Leu Val Ser Arg His Glu Tyr Phe Asn Pro Arg
      465             470             475             480
Leu Pro Val Tyr Arg Trp Val Leu Asp Phe Asp Leu Lys Val Thr Glu
      485             490             495
Gly Arg Arg Thr Leu Asn Asp Ile Tyr Asn Ile Cys Val Thr Leu Arg
      500             505             510
Gln Val Ile Leu Glu Thr Leu Gln Leu Ile Gly Pro Leu Lys Pro Asn

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	515		520		525										
His	Pro	Val	Tyr	Phe	Phe	Lys	Ser	Ala	Cys	Pro	Ala	Val	Thr	Trp	Pro
	530					535					540				
Asp	Asp	Ile	Ser	Asp	Thr	Ala	Phe	Cys	His	Cys	Asp	Ala	Lys	Ile	Gly
545					550					555					560
Met	Arg	Ile	Val	Thr	Pro	Phe	Pro	Ser	Gly	Tyr	Cys	Leu	Val	Gly	Ser
				565					570					575	
Ala	Pro	Leu	Val	Ser	Leu	Thr	Asp	Ile	Leu	Asn	Arg	Val	Val	Lys	Leu
			580					585				590			
Asp	Thr	Arg	Leu	Ala	Ser	Glu	Tyr	Pro	Gly	Ile	Leu	Glu	Asp	Lys	Gly
	595					600					605				
Pro	Phe	Asp	Ser	Gly	Ile	Tyr	Ala	Lys	Gly	Arg	Cys	Val	Arg	Val	Pro
	610				615						620				
His	Cys	Tyr	Lys	Val	Gly	Pro	Gly	Gly	Glu	Leu	Ser	Arg	Leu	Leu	Lys
625					630					635					640
Ile	Ile	Ile	Cys	His	Pro	Glu	Glu	Ser	Asp	Lys	Ser	Ala	Tyr	Leu	Lys
			645						650					655	
Asn	Ala	Phe	Lys	Val	Ser	Asn	Leu	Leu	His	His	Ala	Pro	Gly	Asp	Ser
			660					665					670		
Val	Thr	Lys	Asn	Gly	His	Leu	Val	Tyr	Ala	Ile	Thr	Asp	Glu	Asn	Glu
		675				680					685				
Gly	Phe	Leu	Glu	Ser	Lys	Thr	Lys	Asn	Asn	Leu	Pro	Lys	Thr	Ile	Thr
	690				695					700					
Asp	Leu	Ala	Glu	Lys	Ile	Glu	Arg	Thr	Thr	Glu	Lys	Pro	Leu	Ile	Asp
705					710					715					720
Trp	Ala	Ala	Thr	Ala	Val	Trp	Pro	Lys	Leu	His	Asp	Thr	Ile	Gln	Arg
			725						730					735	
Phe	Phe	Pro	Asp	Asp	Arg	Ile	Gly	Gln	Phe	Ala	Ser	Val	Ser	Phe	Met
			740					745					750		
His	Ser	Gly	Asp	Asn	Ile	Ile	Gln	Val	Lys	Pro	Gln	Lys	Gly	Asn	Asn
		755				760						765			
Phe	Phe	Cys	Ile	Asn	His	Lys	His	Arg	Asn	His	Thr	Gln	Thr	Val	Arg
	770					775					780				
Val	Phe	Leu	Thr	Leu	His	Ser	Thr	Lys	Glu	Ser	Glu	Val	Thr	Val	Thr
785					790					795					800
Phe	Met	Ser	Gln	Cys	Phe	Ala	Ala	Lys	Cys	Asn	His	Asn	Ser	Pro	Thr
			805						810					815	
Ala	His	Phe	Ser	Phe	Met	Val	Pro	Ile	Thr	Gly	Thr				
			820					825							

&lt;210&gt; 112

&lt;211&gt; 1329

&lt;212&gt; DNA

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(1329)

&lt;400&gt; 112

atg	cgg	tat	gtg	ttt	cac	gca	cta	att	tgt	ttt	ata	ggg	ggc	ata	tca	48
Met	Arg	Tyr	Val	Phe	His	Ala	Leu	Ile	Cys	Phe	Ile	Gly	Gly	Ile	Ser	
1				5				10				15				
tcg	tcg	gac	ttc	gac	gac	tcg	tcc	tcg	gac	gaa	atg	gac	gac	ctg	tcc	96
Ser	Ser	Asp	Phe	Asp	Asp	Ser	Ser	Ser	Asp	Glu	Met	Asp	Asp	Leu	Ser	
			20					25					30			
cca	acg	ccg	gag	cca	gaa	ccg	tcc	aca	acg	ccg	aac	agc	ttt	ccg	gag	144

Pro	Thr	Pro	Glu	Pro	Glu	Pro	Ser	Thr	Thr	Pro	Asn	Ser	Phe	Pro	Glu		
		35					40					45					
ggg	ccc	aaa	tca	caa	gtg	gtg	gcg	tta	cct	aaa	atc	cgt	aaa	aga	tct	192	
Gly	Pro	Lys	Ser	Gln	Val	Val	Ala	Leu	Pro	Lys	Ile	Arg	Lys	Arg	Ser		
	50					55					60						
cga	tct	gag	acg	ccg	gta	aaa	att	gag	cac	aga	tct	cca	ctt	aac	cgc	240	
Arg	Ser	Glu	Thr	Pro	Val	Lys	Ile	Glu	His	Arg	Ser	Pro	Leu	Asn	Arg		
	65				70					75					80		
tcg	cga	tct	cga	tcc	aga	acg	cgg	tcc	ggg	tcc	ggt	caa	cga	tca	aac	288	
Ser	Arg	Ser	Arg	Ser	Arg	Thr	Arg	Ser	Gly	Ser	Gly	Gln	Arg	Ser	Asn		
				85					90					95			
cag	tca	ggc	aga	tac	gtc	aag	aga	ttc	aaa	cca	acg	gtt	gat	gca	ccc	336	
Gln	Ser	Gly	Arg	Tyr	Val	Lys	Arg	Phe	Lys	Pro	Thr	Val	Asp	Ala	Pro		
			100					105					110				
cgt	cat	cga	gaa	ccg	tgg	cac	agg	ggc	ggt	aag	gga	aag	gcc	ccg	ttt	384	
Arg	His		Glu	Pro	Trp	His	Arg	Gly	Gly	Lys	Gly	Lys	Ala	Pro	Phe		
		115					120					125					
atc	cgc	aga	gac	gca	atg	gct	ggc	cgc	ggt	cga	cgc	aca	tac	ggc	cac	432	
Ile	Arg	Arg	Asp	Ala	Met	Ala	Gly	Arg	Gly	Arg	Arg	Thr	Tyr	Gly	His		
		130				135						140					
gac	tat	cgc	gga	aaa	gcc	gct	tta	acg	cgg	agc	att	aaa	gag	tct	att	480	
Asp	Tyr	Arg	Gly	Lys	Ala	Ala	Leu	Thr	Arg	Ser	Ile	Lys	Glu	Ser	Ile		
	145				150					155				160			
aaa	aag	atg	cac	ctt	cca	tcc	acc	atg	ctc	tct	cgt	gcg	cac	gat	aaa	528	
Lys	Lys	Met	His	Leu	Pro	Ser	Thr	Met	Leu	Ser	Arg	Ala	His	Asp	Lys		
				165					170					175			
aag	gta	ttc	gag	gga	ctg	ttg	cca	cga	cac	ctg	gga	cag	tgc	ttt	cag	576	
Lys	Val	Phe	Glu	Gly	Leu	Leu	Pro	Arg	His	Leu	Gly	Gln	Cys	Phe	Gln		
			180					185					190				
gtg	tgc	ctg	ccg	gcg	ccg	cca	ccg	ctg	caa	ccc	gag	gtg	ttc	acg	gat	624	
Val	Cys	Leu	Pro	Ala	Pro	Pro	Pro	Leu	Gln	Pro	Glu	Val	Phe	Thr	Asp		
		195				200						205					
cga	cag	ctt	acc	gct	ata	gtc	aag	tct	ggc	ggg	cgc	aga	gac	gcg	ctg	672	
Arg	Gln	Leu	Thr	Ala	Ile	Val	Lys	Ser	Gly	Gly	Arg	Arg	Asp	Ala	Leu		
	210					215					220						
gtg	gcc	aaa	aaa	gtt	agc	ctg	gct	aaa	cta	aca	agc	cta	tac	aaa	ccc	720	
Val	Ala	Lys	Lys	Val	Ser	Leu	Ala	Lys	Leu	Thr	Ser	Leu	Tyr	Lys	Pro		
	225					230				235					240		
ctg	ctc	acg	ttt	gtg	acg	ggg	aga	aac	aac	cag	gcc	cac	tgg	ttg	gcg	768	
Leu	Leu	Thr	Phe	Val	Thr	Gly	Arg	Asn	Asn	Gln	Ala	His	Trp	Leu	Ala		
				245					250					255			
acg	cgc	aaa	aac	acg	cta	gcg	tct	gcg	gga	ctc	gag	gct	ctc	gcg	gcc	816	
Thr	Arg	Lys	Asn	Thr	Leu	Ala	Ser	Ala	Gly	Leu	Glu	Ala	Leu	Ala	Ala		
			260					265					270				
ttt	atc	gag	gaa	ggg	ctg	gcg	tgg	gcc	cag	gtg	tgc	gta	tct	caa	aac	864	
Phe	Ile	Glu	Glu	Gly	Leu	Ala	Trp	Ala	Gln	Val	Cys	Val	Ser	Gln	Asn		

275	280	285	
aga tcg ttg aac gac agc aac cta gat atc att cta gac agt agt cag			912
Arg Ser Leu Asn Asp Ser Asn Leu Asp Ile Ile Leu Asp Ser Ser Gln			
290	295	300	
agc gtg tgc acc tgg ttc atc tcc aaa atc agg cat ttg cac ata cag			960
Ser Val Cys Thr Trp Phe Ile Ser Lys Ile Arg His Leu His Ile Gln			
305	310	315	320
tgc ttc ttg gag aat cag ggt gag gtt agc ctg gtg aag cag cta act			1008
Cys Phe Leu Glu Asn Gln Gly Glu Val Ser Leu Val Lys Gln Leu Thr			
	325	330	335
tac ctc gtg tgt ata aat aac cgc ctg gcg gag gcg gcg aac ctg gcg			1056
Tyr Leu Val Cys Ile Asn Asn Arg Leu Ala Glu Ala Ala Asn Leu Ala			
	340	345	350
gga gag gtg aaa ctg aat ttt aaa ctc gga atg ctg att ggg ttc gcc			1104
Gly Glu Val Lys Leu Asn Phe Lys Leu Gly Met Leu Ile Gly Phe Ala			
	355	360	365
cta acc ttg ccg gcg ctc ctt gca gag cat aag ttg tct ggc gag agc			1152
Leu Thr Leu Pro Ala Leu Leu Ala Glu His Lys Leu Ser Gly Glu Ser			
	370	375	380
ctg tac ctg ttt agg tct ttc ctg gag aaa tat aga ccg gga gat gtc			1200
Leu Tyr Leu Phe Arg Ser Phe Leu Glu Lys Tyr Arg Pro Gly Asp Val			
	385	390	400
atg gga ctc tta aat tca ata gtg gtg gag cac tac acc aaa tgt cgt			1248
Met Gly Leu Leu Asn Ser Ile Val Val Glu His Tyr Thr Lys Cys Arg			
	405	410	415
agc gcg gag tgt gtc att aca acc cac gcc atg gta gga tct ggc gaa			1296
Ser Ala Glu Cys Val Ile Thr Thr His Ala Met Val Gly Ser Gly Glu			
	420	425	430
aac aac aag gga ctt ttt ttc ttt cca gtg taa			1329
Asn Asn Lys Gly Leu Phe Phe Phe Pro Val			
	435	440	

&lt;210&gt; 113

&lt;211&gt; 442

&lt;212&gt; PRT

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 113

Met Arg Tyr Val Phe His Ala Leu Ile Cys Phe Ile Gly Gly Ile Ser			
1	5	10	15
Ser Ser Asp Phe Asp Asp Ser Ser Ser Asp Glu Met Asp Asp Leu Ser			
	20	25	30
Pro Thr Pro Glu Pro Glu Pro Ser Thr Thr Pro Asn Ser Phe Pro Glu			
	35	40	45
Gly Pro Lys Ser Gln Val Val Ala Leu Pro Lys Ile Arg Lys Arg Ser			
	50	55	60
Arg Ser Glu Thr Pro Val Lys Ile Glu His Arg Ser Pro Leu Asn Arg			
	65	70	75
Ser Arg Ser Arg Ser Arg Thr Arg Ser Gly Ser Gly Gln Arg Ser Asn			
	85	90	95



Gln Ser Gly Arg Tyr Val Lys Arg Phe Lys Pro Thr Val Asp Ala Pro  
 100 105 110  
 Arg His Arg Glu Pro Trp His Arg Gly Gly Lys Gly Lys Ala Pro Phe  
 115 120 125  
 Ile Arg Arg Asp Ala Met Ala Gly Arg Gly Arg Arg Thr Tyr Gly His  
 130 135 140  
 Asp Tyr Arg Gly Lys Ala Ala Leu Thr Arg Ser Ile Lys Glu Ser Ile  
 145 150 155 160  
 Lys Lys Met His Leu Pro Ser Thr Met Leu Ser Arg Ala His Asp Lys  
 165 170 175  
 Lys Val Phe Glu Gly Leu Leu Pro Arg His Leu Gly Gln Cys Phe Gln  
 180 185 190  
 Val Cys Leu Pro Ala Pro Pro Pro Leu Gln Pro Glu Val Phe Thr Asp  
 195 200 205  
 Arg Gln Leu Thr Ala Ile Val Lys Ser Gly Gly Arg Arg Asp Ala Leu  
 210 215 220  
 Val Ala Lys Lys Val Ser Leu Ala Lys Leu Thr Ser Leu Tyr Lys Pro  
 225 230 235 240  
 Leu Leu Thr Phe Val Thr Gly Arg Asn Asn Gln Ala His Trp Leu Ala  
 245 250 255  
 Thr Arg Lys Asn Thr Leu Ala Ser Ala Gly Leu Glu Ala Leu Ala Ala  
 260 265 270  
 Phe Ile Glu Glu Gly Leu Ala Trp Ala Gln Val Cys Val Ser Gln Asn  
 275 280 285  
 Arg Ser Leu Asn Asp Ser Asn Leu Asp Ile Ile Leu Asp Ser Ser Gln  
 290 295 300  
 Ser Val Cys Thr Trp Phe Ile Ser Lys Ile Arg His Leu His Ile Gln  
 305 310 315 320  
 Cys Phe Leu Glu Asn Gln Gly Glu Val Ser Leu Val Lys Gln Leu Thr  
 325 330 335  
 Tyr Leu Val Cys Ile Asn Asn Arg Leu Ala Glu Ala Ala Asn Leu Ala  
 340 345 350  
 Gly Glu Val Lys Leu Asn Phe Lys Leu Gly Met Leu Ile Gly Phe Ala  
 355 360 365  
 Leu Thr Leu Pro Ala Leu Leu Ala Glu His Lys Leu Ser Gly Glu Ser  
 370 375 380  
 Leu Tyr Leu Phe Arg Ser Phe Leu Glu Lys Tyr Arg Pro Gly Asp Val  
 385 390 395 400  
 Met Gly Leu Leu Asn Ser Ile Val Val Glu His Tyr Thr Lys Cys Arg  
 405 410 415  
 Ser Ala Glu Cys Val Ile Thr Thr His Ala Met Val Gly Ser Gly Glu  
 420 425 430  
 Asn Asn Lys Gly Leu Phe Phe Phe Pro Val  
 435 440

<210> 114  
 <211> 1248  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(1248)

<400> 114  
 atg gct acc tgg cgc cca cct cag agc ggt ggt ccg tcc gcc atg gga 48  
 Met Ala Thr Trp Arg Pro Gln Ser Gly Gly Pro Ser Ala Met Gly  
 1 5 10 15

ctt cga gaa tgg atc gtt act cac gca aat ctt gca acg tat tcg gga	96
Leu Arg Glu Trp Ile Val Thr His Ala Asn Leu Ala Thr Tyr Ser Gly	
20 25 30	
ctg ttt tgg gca gac gac gaa aaa acc agg gtc gtg ctg gcg act acg	144
Leu Phe Trp Ala Asp Asp Glu Lys Thr Arg Val Val Leu Ala Thr Thr	
35 40 45	
acc ccg tgg tct gtg gga ttt gat tac ctt cgg gat ggg aag atg tac	192
Thr Pro Trp Ser Val Gly Phe Asp Tyr Leu Arg Asp Gly Lys Met Tyr	
50 55 60	
gag gac tac tgc aac cag aga aac atc ccc ctt ccg tcc ggg agg tct	240
Glu Asp Tyr Cys Asn Gln Arg Asn Ile Pro Leu Pro Ser Gly Arg Ser	
65 70 75 80	
agg ctg ggc cag gcc aag gcg cgc cta ttg ggt gcg ata aga aag agt	288
Arg Leu Gly Gln Ala Lys Ala Arg Leu Leu Gly Ala Ile Arg Lys Ser	
85 90 95	
gcc tat ttc ata gaa gaa aag gac gtt ttg aga cgg agt ttt tca ttt	336
Ala Tyr Phe Ile Glu Glu Lys Asp Val Leu Arg Arg Ser Phe Ser Phe	
100 105 110	
gca aac gtg gtc ttc agg ttg cgc tcc gat gaa gag atg tta tgc agg	384
Ala Asn Val Val Phe Arg Leu Arg Ser Asp Glu Glu Met Leu Cys Arg	
115 120 125	
ttg tgc cct cgg gcc tct ggg gta gcg gca gaa ctg cgg ggc ttg agg	432
Leu Cys Pro Arg Ala Ser Gly Val Ala Ala Glu Leu Arg Gly Leu Arg	
130 135 140	
ttt cgg atg ttt aag cgc aag ggc gcc gac gag gcg ggc agg gta tct	480
Phe Arg Met Phe Lys Arg Lys Gly Ala Asp Glu Ala Gly Arg Val Ser	
145 150 155 160	
gaa tac acg gta aag cag ctg ctc ggg cta ctt cgt acc cgt ccc gcc	528
Glu Tyr Thr Val Lys Gln Leu Leu Gly Leu Leu Arg Thr Arg Pro Ala	
165 170 175	
ggt acc ttc acc atg acc gcc ccg gcc acc gag gcg tct gca acc gca	576
Gly Thr Phe Thr Met Thr Ala Pro Ala Thr Glu Ala Ser Ala Thr Ala	
180 185 190	
acc gcc tcc ggt gaa gac ggt agg cag gac aat agt caa ggg ggc gcg	624
Thr Ala Ser Gly Glu Asp Gly Arg Gln Asp Asn Ser Gln Gly Gly Ala	
195 200 205	
gtt gcg ttg ccc ggg gaa cac gcc ctg ccg cta tct gca tcg agc ggt	672
Val Ala Leu Pro Gly Glu His Ala Leu Pro Leu Ser Ala Ser Ser Gly	
210 215 220	
ctt tct gcg tgt ttg gcg cca tct gtt gac gac ccg tgg gga ttt atg	720
Leu Ser Ala Cys Leu Ala Pro Ser Val Asp Asp Pro Trp Gly Phe Met	
225 230 235 240	
cat att cag gtt tat tat tat ggg gtc ctt caa gca cag act ttt acc	768
His Ile Gln Val Tyr Tyr Tyr Gly Val Leu Gln Ala Gln Thr Phe Thr	
245 250 255	
cat tct ggg atg ggc gtt cgt tta tcc acg aga cca acg gat aaa aat	816

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His Ser Gly Met Gly Val Arg Leu Ser Thr Arg Pro Thr Asp Lys Asn
      260                               265                               270

gaa cac cac gtc tgc atg gct ccc ggg ccg ctt cag ttg tgg ttg ccc 864
Glu His His Val Cys Met Ala Pro Gly Pro Leu Gln Leu Trp Leu Pro
      275                               280                               285

ccg gcg cct tat atg gat gac gat ttt atg ttg agc aga ctt gtg aac 912
Pro Ala Pro Tyr Met Asp Asp Asp Phe Met Leu Ser Arg Leu Val Asn
      290                               295                               300

gcg tta cac gcc ctg gag gac ggc att gtt ttg tgc agt tgt cag tat 960
Ala Leu His Ala Leu Glu Asp Gly Ile Val Leu Cys Ser Cys Gln Tyr
      305                               310                               315                               320

ggg att atg atg aat ggc tat gga ttt ctt aat tta tgg ttc cgt ggc 1008
Gly Ile Met Met Asn Gly Tyr Gly Phe Leu Asn Leu Trp Phe Arg Gly
      325                               330                               335

aat acc tca aac acc tct gaa cca aga cgc gtg cca tct ggg gtg gga 1056
Asn Thr Ser Asn Thr Ser Glu Pro Arg Arg Val Pro Ser Gly Val Gly
      340                               345                               350

cat cgc gtt ttt gat acc gat gaa tac atg tta aag tta gcc cag tca 1104
His Arg Val Phe Asp Thr Asp Glu Tyr Met Leu Lys Leu Ala Gln Ser
      355                               360                               365

cca cga ccc tct gat ccc ggg cca ccc gat ccg ttt gca cag att tgg 1152
Pro Arg Pro Ser Asp Pro Gly Pro Pro Asp Pro Phe Ala Gln Ile Trp
      370                               375                               380

gtg tct gcc tgg tcc cta tac gag gag gag gat caa tca cag gcg ccg 1200
Val Ser Ala Trp Ser Leu Tyr Glu Glu Glu Asp Gln Ser Gln Ala Pro
      385                               390                               395                               400

ata tgt att gtt gtc cac cag cgt gaa ata tat cgg cac ttt gaa tga 1248
Ile Cys Ile Val Val His Gln Arg Glu Ile Tyr Arg His Phe Glu
      405                               410                               415

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&lt;210&gt; 115

&lt;211&gt; 415

&lt;212&gt; PRT

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 115

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Met Ala Thr Trp Arg Pro Pro Gln Ser Gly Gly Pro Ser Ala Met Gly
  1           5           10           15
Leu Arg Glu Trp Ile Val Thr His Ala Asn Leu Ala Thr Tyr Ser Gly
  20           25           30
Leu Phe Trp Ala Asp Asp Glu Lys Thr Arg Val Val Leu Ala Thr Thr
  35           40           45
Thr Pro Trp Ser Val Gly Phe Asp Tyr Leu Arg Asp Gly Lys Met Tyr
  50           55           60
Glu Asp Tyr Cys Asn Gln Arg Asn Ile Pro Leu Pro Ser Gly Arg Ser
  65           70           75           80
Arg Leu Gly Gln Ala Lys Ala Arg Leu Leu Gly Ala Ile Arg Lys Ser
  85           90           95
Ala Tyr Phe Ile Glu Glu Lys Asp Val Leu Arg Arg Ser Phe Ser Phe
  100          105          110
Ala Asn Val Val Phe Arg Leu Arg Ser Asp Glu Glu Met Leu Cys Arg

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      115      120      125
Leu Cys Pro Arg Ala Ser Gly Val Ala Ala Glu Leu Arg Gly Leu Arg
      130      135      140
Phe Arg Met Phe Lys Arg Lys Gly Ala Asp Glu Ala Gly Arg Val Ser
145      150      155      160
Glu Tyr Thr Val Lys Gln Leu Leu Gly Leu Leu Arg Thr Arg Pro Ala
      165      170      175
Gly Thr Phe Thr Met Thr Ala Pro Ala Thr Glu Ala Ser Ala Thr Ala
      180      185      190
Thr Ala Ser Gly Glu Asp Gly Arg Gln Asp Asn Ser Gln Gly Gly Ala
      195      200      205
Val Ala Leu Pro Gly Glu His Ala Leu Pro Leu Ser Ala Ser Ser Gly
210      215      220
Leu Ser Ala Cys Leu Ala Pro Ser Val Asp Asp Pro Trp Gly Phe Met
225      230      235      240
His Ile Gln Val Tyr Tyr Tyr Gly Val Leu Gln Ala Gln Thr Phe Thr
      245      250      255
His Ser Gly Met Gly Val Arg Leu Ser Thr Arg Pro Thr Asp Lys Asn
      260      265      270
Glu His His Val Cys Met Ala Pro Gly Pro Leu Gln Leu Trp Leu Pro
      275      280      285
Pro Ala Pro Tyr Met Asp Asp Asp Phe Met Leu Ser Arg Leu Val Asn
290      295      300
Ala Leu His Ala Leu Glu Asp Gly Ile Val Leu Cys Ser Cys Gln Tyr
305      310      315      320
Gly Ile Met Met Asn Gly Tyr Gly Phe Leu Asn Leu Trp Phe Arg Gly
      325      330      335
Asn Thr Ser Asn Thr Ser Glu Pro Arg Arg Val Pro Ser Gly Val Gly
      340      345      350
His Arg Val Phe Asp Thr Asp Glu Tyr Met Leu Lys Leu Ala Gln Ser
      355      360      365
Pro Arg Pro Ser Asp Pro Gly Pro Pro Asp Pro Phe Ala Gln Ile Trp
      370      375      380
Val Ser Ala Trp Ser Leu Tyr Glu Glu Glu Asp Gln Ser Gln Ala Pro
385      390      395      400
Ile Cys Ile Val Val His Gln Arg Glu Ile Tyr Arg His Phe Glu
      405      410      415

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<210> 116
<211> 1248
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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<220>
<221> CDS
<222> (1)..(1248)

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<400> 116
atg gcg ggc cgt gga gtc gat atc agg gcc tgg ctc gtt gcc gcg gtc 48
Met Ala Gly Arg Gly Val Asp Ile Arg Ala Trp Leu Val Ala Ala Val
      1      5      10      15

gaa tcg ggc gag tac cgc gga ttg gtt tgg gag aat gag gac aag acc 96
Glu Ser Gly Glu Tyr Arg Gly Leu Val Trp Glu Asn Glu Asp Lys Thr
      20      25      30

gtt gtc cgg gtc ccg tgg aac aaa gta act gca gat cgg tcc gta tgg 144
Val Val Arg Val Pro Trp Asn Lys Val Thr Ala Asp Arg Ser Val Trp
      35      40      45

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aat agc gag aag ttt ttt gat gac tac tgc aac atg cga ggc ata tgt	192
Asn Ser Glu Lys Phe Phe Asp Asp Tyr Cys Asn Met Arg Gly Ile Cys	
50 55 60	
cag ggc gaa aaa ccg tcc cac tat ggc aga ttc agg aaa atg aga ttc	240
Gln Gly Glu Lys Pro Ser His Tyr Gly Arg Phe Arg Lys Met Arg Phe	
65 70 75 80	
ttg tac gac atg aga cac cac aaa agt ata cga gag ctt aaa ttt att	288
Leu Tyr Asp Met Arg His His Lys Ser Ile Arg Glu Leu Lys Phe Ile	
85 90 95	
aat aag gcc tat ggg cga ccg ggt gct cga tat aga ctg ttt cgc ctg	336
Asn Lys Ala Tyr Gly Arg Pro Gly Ala Arg Tyr Arg Leu Phe Arg Leu	
100 105 110	
ttg ccg gaa ccg gtg gta agt tgt gca atg tgt aat ctg atg tct tcc	384
Leu Pro Glu Pro Val Val Ser Cys Ala Met Cys Asn Leu Met Ser Ser	
115 120 125	
acc gaa act cag tgc ctt ggt tta atc agt gag ttc caa tac gac cag	432
Thr Glu Thr Gln Cys Leu Gly Leu Ile Ser Glu Phe Gln Tyr Asp Gln	
130 135 140	
ggg ggt ggg tct gga cgt gaa aga aga cgg gtt ttt acc gca acg gta	480
Gly Gly Gly Ser Gly Arg Glu Arg Arg Arg Val Phe Thr Ala Thr Val	
145 150 155 160	
ttg gct cgg agt cgg atg gac aaa aac aag cgt gtg cgc gag cat cgg	528
Leu Ala Arg Ser Arg Met Asp Lys Asn Lys Arg Val Arg Glu His Arg	
165 170 175	
ctg cca ggg gcc atc caa tta acg ttt cta tat ttt gga gag acc gtt	576
Leu Pro Gly Ala Ile Gln Leu Thr Phe Leu Tyr Phe Gly Glu Thr Val	
180 185 190	
ggc ctc gaa cgt gtt cat gct gga ata cgg gtc tgc agt cga cca tgt	624
Gly Leu Glu Arg Val His Ala Gly Ile Arg Val Cys Ser Arg Pro Cys	
195 200 205	
ccc gtc ctc gct ggc cac gcg tgt tgt ttc caa gat gag agg act ttg	672
Pro Val Leu Ala Gly His Ala Cys Cys Phe Gln Asp Glu Arg Thr Leu	
210 215 220	
ttt tta ccg tca ccg ggg gtc gtt gac tgt cag ttt gcc aga gaa gat	720
Phe Leu Pro Ser Pro Gly Val Val Asp Cys Gln Phe Ala Arg Glu Asp	
225 230 235 240	
cta agg gtt atg cac aaa aag tgc gag aag ggt gtg ttg att acc ctt	768
Leu Arg Val Met His Lys Lys Cys Glu Lys Gly Val Leu Ile Thr Leu	
245 250 255	
acg gat act ggc att tgc gtg aag aac ctg gag aac cgg gaa atg aag	816
Thr Asp Thr Gly Ile Cys Val Lys Asn Leu Glu Asn Arg Glu Met Lys	
260 265 270	
gtg ctt act aac aat gag gag gag tat aag gac ctg cca tcc agg caa	864
Val Leu Thr Asn Asn Glu Glu Glu Tyr Lys Asp Leu Pro Ser Arg Gln	
275 280 285	

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ccc gtt cag gtt ttt gat atg gtg gat tat ctt aga gct ctt gca agg 912
Pro Val Gln Val Phe Asp Met Val Asp Tyr Leu Arg Ala Leu Ala Arg
      290                      295                      300

tcc ccg aac cct gga gac gaa cca cct aga gat tat gca cag atc gcc 960
Ser Pro Asn Pro Gly Asp Glu Pro Pro Arg Asp Tyr Ala Gln Ile Ala
305                      310                      315                      320

ctg tgt ctg tcg gtc cag tcg ccg aat ccc gtc gat gcg ccc atc gcc 1008
Leu Cys Leu Ser Val Gln Ser Pro Asn Pro Val Asp Ala Pro Ile Ala
                        325                      330                      335

atg aga ctg cgt tac gtg tgc gaa acc tcg tct gta tgc ggt aca gag 1056
Met Arg Leu Arg Tyr Val Cys Glu Thr Ser Ser Val Cys Gly Thr Glu
                        340                      345                      350

ggg tgt ttt tac ccc ggg acg act gta aca tca gag ggt cgc acc gac 1104
Gly Cys Phe Tyr Pro Gly Thr Thr Val Thr Ser Glu Gly Arg Thr Asp
      355                      360                      365

tgt tca ttc cag atg gaa gat cca gga gag ggg acg agc caa tcg cat 1152
Cys Ser Phe Gln Met Glu Asp Pro Gly Glu Gly Thr Ser Gln Ser His
      370                      375                      380

gac ccg gca gta gag ctg ggc gac tcc gga cca gat tca atg gac gat 1200
Asp Pro Ala Val Glu Leu Gly Asp Ser Gly Pro Asp Ser Met Asp Asp
385                      390                      395                      400

ccg gac gcg gga acg agc ggt gaa gat gat ggg gtg gcg tgc tcg tga 1248
Pro Asp Ala Gly Thr Ser Gly Glu Asp Asp Gly Val Ala Cys Ser
                        405                      410                      415

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&lt;210&gt; 117

&lt;211&gt; 415

&lt;212&gt; PRT

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 117

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Met Ala Gly Arg Gly Val Asp Ile Arg Ala Trp Leu Val Ala Ala Val
 1          5          10          15
Glu Ser Gly Glu Tyr Arg Gly Leu Val Trp Glu Asn Glu Asp Lys Thr
      20          25          30
Val Val Arg Val Pro Trp Asn Lys Val Thr Ala Asp Arg Ser Val Trp
      35          40          45
Asn Ser Glu Lys Phe Phe Asp Asp Tyr Cys Asn Met Arg Gly Ile Cys
      50          55          60
Gln Gly Glu Lys Pro Ser His Tyr Gly Arg Phe Arg Lys Met Arg Phe
      65          70          75          80
Leu Tyr Asp Met Arg His His Lys Ser Ile Arg Glu Leu Lys Phe Ile
      85          90          95
Asn Lys Ala Tyr Gly Arg Pro Gly Ala Arg Tyr Arg Leu Phe Arg Leu
      100          105          110
Leu Pro Glu Pro Val Val Ser Cys Ala Met Cys Asn Leu Met Ser Ser
      115          120          125
Thr Glu Thr Gln Cys Leu Gly Leu Ile Ser Glu Phe Gln Tyr Asp Gln
      130          135          140
Gly Gly Gly Ser Gly Arg Glu Arg Arg Arg Val Phe Thr Ala Thr Val
      145          150          155          160
Leu Ala Arg Ser Arg Met Asp Lys Asn Lys Arg Val Arg Glu His Arg
      165          170          175

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Leu Pro Gly Ala Ile Gln Leu Thr Phe Leu Tyr Phe Gly Glu Thr Val  
                   180                  185                  190  
 Gly Leu Glu Arg Val His Ala Gly Ile Arg Val Cys Ser Arg Pro Cys  
                   195                  200                  205  
 Pro Val Leu Ala Gly His Ala Cys Cys Phe Gln Asp Glu Arg Thr Leu  
                   210                  215                  220  
 Phe Leu Pro Ser Pro Gly Val Val Asp Cys Gln Phe Ala Arg Glu Asp  
 225                  230                  235                  240  
 Leu Arg Val Met His Lys Lys Cys Glu Lys Gly Val Leu Ile Thr Leu  
                   245                  250                  255  
 Thr Asp Thr Gly Ile Cys Val Lys Asn Leu Glu Asn Arg Glu Met Lys  
                   260                  265                  270  
 Val Leu Thr Asn Asn Glu Glu Glu Tyr Lys Asp Leu Pro Ser Arg Gln  
                   275                  280                  285  
 Pro Val Gln Val Phe Asp Met Val Asp Tyr Leu Arg Ala Leu Ala Arg  
                   290                  295                  300  
 Ser Pro Asn Pro Gly Asp Glu Pro Pro Arg Asp Tyr Ala Gln Ile Ala  
 305                  310                  315                  320  
 Leu Cys Leu Ser Val Gln Ser Pro Asn Pro Val Asp Ala Pro Ile Ala  
                   325                  330                  335  
 Met Arg Leu Arg Tyr Val Cys Glu Thr Ser Ser Val Cys Gly Thr Glu  
                   340                  345                  350  
 Gly Cys Phe Tyr Pro Gly Thr Thr Val Thr Ser Glu Gly Arg Thr Asp  
                   355                  360                  365  
 Cys Ser Phe Gln Met Glu Asp Pro Gly Glu Gly Thr Ser Gln Ser His  
                   370                  375                  380  
 Asp Pro Ala Val Glu Leu Gly Asp Ser Gly Pro Asp Ser Met Asp Asp  
 385                  390                  395                  400  
 Pro Asp Ala Gly Thr Ser Gly Glu Asp Asp Gly Val Ala Cys Ser  
                   405                  410                  415

<210> 118  
 <211> 1056  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(1056)

<400> 118  
 atg gag cgg ccg gtc cga gtg acc aaa cca tcc agc ctt cga gga tgg 48  
 Met Glu Arg Pro Val Arg Val Thr Lys Pro Ser Ser Leu Arg Gly Trp  
   1                  5                  10                  15  
  
 ctg gtg gaa tgc tgc gag aca ggt cgt cat ccc gga atg cgg tgg gtt 96  
 Leu Val Glu Cys Cys Glu Thr Gly Arg His Pro Gly Met Arg Trp Val  
                   20                  25                  30  
  
 gac gag gaa aga act tta atc cgc ata ccg tgg aat cac gac aga ggg 144  
 Asp Glu Glu Arg Thr Leu Ile Arg Ile Pro Trp Asn His Asp Arg Gly  
                   35                  40                  45  
  
 agc aga gga gtc gag gag gcg gaa aaa aac att ttt att gac tac tgt 192  
 Ser Arg Gly Val Glu Glu Ala Glu Lys Asn Ile Phe Ile Asp Tyr Cys  
                   50                  55                  60  
  
 cga tcc agg ggc atc ttg cac gcg gct ggc agg gaa tta acc gct aag 240  
 Arg Ser Arg Gly Ile Leu His Ala Ala Gly Arg Glu Leu Thr Ala Lys

65	70	75	80	
gaa tgc aaa aac tgg cta tcc agc gcc ata cgg cat agt caa acc gtg				288
Glu Cys Lys Asn Trp Leu Ser Ser Ala Ile Arg His Ser Gln Thr Val				
	85	90	95	
tcg gac gtg tca act aag gac aac ctt tcg act cca tat ccg gac aga				336
Ser Asp Val Ser Thr Lys Asp Asn Leu Ser Thr Pro Tyr Pro Asp Arg				
	100	105	110	
tgc cga atc att cgc ctt tta cca att acc gtg agg tcg tgt gct cgt				384
Cys Arg Ile Ile Arg Leu Leu Pro Ile Thr Val Arg Ser Cys Ala Arg				
	115	120	125	
tgc gat cag gcc tcc ggc act act gct atg tta cgg ggg ttg cgc gag				432
Cys Asp Gln Ala Ser Gly Thr Thr Ala Met Leu Arg Gly Leu Arg Glu				
	130	135	140	
gag gcc gtg aat aag ttt ggt ccg gtt ggc gcc ggt gtt cgg tac act				480
Glu Ala Val Asn Lys Phe Gly Pro Val Gly Ala Gly Val Arg Tyr Thr				
	145	150	155	160
ggt gcg gtg gga gcc ggg ggt gaa cag tgt tgg atg cta cgt ata atg				528
Gly Ala Val Gly Ala Gly Gly Glu Gln Cys Trp Met Leu Arg Ile Met				
	165	170	175	
ttt tac tat tat ggg gac aga gtt ggt gaa gtg gtg act gaa tcg tcc				576
Phe Tyr Tyr Tyr Gly Asp Arg Val Gly Glu Val Val Thr Glu Ser Ser				
	180	185	190	
aac ggc atc cgt gtg ctc cca ttg tcc gaa cgt cgc cct caa ggg cac				624
Asn Gly Ile Arg Val Leu Pro Leu Ser Glu Arg Arg Pro Gln Gly His				
	195	200	205	
ata tgc gcc gca ccg atc gcc gag cag gca ctg gtt ccg gag att cca				672
Ile Cys Ala Ala Pro Ile Ala Glu Gln Ala Leu Val Pro Glu Ile Pro				
	210	215	220	
ggc cac tta gca gag ttt cag gcc gag gcg ttg cgc ttc ctg gat aaa				720
Gly His Leu Ala Glu Phe Gln Ala Glu Ala Leu Arg Phe Leu Asp Lys				
	225	230	235	240
gat ctt ttg cgc ggg ttg gcg ttt tgg gcc gac ccc tcc ggc att tac				768
Asp Leu Leu Arg Gly Leu Ala Phe Trp Ala Asp Pro Ser Gly Ile Tyr				
	245	250	255	
att aga tgg ttg ggg cat tcc ctg gcg ttc gtt caa ggg aac gtc gaa				816
Ile Arg Trp Leu Gly His Ser Leu Ala Phe Val Gln Gly Asn Val Glu				
	260	265	270	
tct acg ggg gcg gtt gcg gtc ctg tcg tgc gcc aac gcg tgt cgt gca				864
Ser Thr Gly Ala Val Ala Val Leu Ser Cys Ala Asn Ala Cys Arg Ala				
	275	280	285	
ttt aac ttg gtt gac tat atg aca gcc atg gcc aga aca tct ccg gac				912
Phe Asn Leu Val Asp Tyr Met Thr Ala Met Ala Arg Thr Ser Pro Asp				
	290	295	300	
gga gcg gcg ctt cca caa gct tgt gtt tac cta tat ttt ggg ggc gta				960
Gly Ala Ala Leu Pro Gln Ala Cys Val Tyr Leu Tyr Phe Gly Gly Val				
	305	310	315	320



cct aca ccc gag ggc gga gtg caa agc act gta ccg cta att att cag 1008  
Pro Thr Pro Glu Gly Gly Val Gln Ser Thr Val Pro Leu Ile Ile Gln  
325 330 335

ctg tgg cac gag tgt ctg tgg cgg gcg ttg tcc gcc gct aat gtt taa 1056  
Leu Trp His Glu Cys Leu Trp Arg Ala Leu Ser Ala Ala Asn Val  
340 345 350

<210> 119

<211> 351

<212> PRT

<213> Macaca mulatta rhadinovirus 17577

<400> 119

Met	Glu	Arg	Pro	Val	Arg	Val	Thr	Lys	Pro	Ser	Ser	Leu	Arg	Gly	Trp
1				5					10					15	
Leu	Val	Glu	Cys	Cys	Glu	Thr	Gly	Arg	His	Pro	Gly	Met	Arg	Trp	Val
			20					25					30		
Asp	Glu	Glu	Arg	Thr	Leu	Ile	Arg	Ile	Pro	Trp	Asn	His	Asp	Arg	Gly
		35					40					45			
Ser	Arg	Gly	Val	Glu	Glu	Ala	Glu	Lys	Asn	Ile	Phe	Ile	Asp	Tyr	Cys
	50					55					60				
Arg	Ser	Arg	Gly	Ile	Leu	His	Ala	Ala	Gly	Arg	Glu	Leu	Thr	Ala	Lys
65				70					75					80	
Glu	Cys	Lys	Asn	Trp	Leu	Ser	Ser	Ala	Ile	Arg	His	Ser	Gln	Thr	Val
			85						90				95		
Ser	Asp	Val	Ser	Thr	Lys	Asp	Asn	Leu	Ser	Thr	Pro	Tyr	Pro	Asp	Arg
		100					105						110		
Cys	Arg	Ile	Ile	Arg	Leu	Leu	Pro	Ile	Thr	Val	Arg	Ser	Cys	Ala	Arg
	115						120					125			
Cys	Asp	Gln	Ala	Ser	Gly	Thr	Thr	Ala	Met	Leu	Arg	Gly	Leu	Arg	Glu
	130					135					140				
Glu	Ala	Val	Asn	Lys	Phe	Gly	Pro	Val	Gly	Ala	Gly	Val	Arg	Tyr	Thr
145				150					155					160	
Gly	Ala	Val	Gly	Ala	Gly	Gly	Glu	Gln	Cys	Trp	Met	Leu	Arg	Ile	Met
			165						170				175		
Phe	Tyr	Tyr	Tyr	Gly	Asp	Arg	Val	Gly	Glu	Val	Val	Thr	Glu	Ser	Ser
		180						185					190		
Asn	Gly	Ile	Arg	Val	Leu	Pro	Leu	Ser	Glu	Arg	Arg	Pro	Gln	Gly	His
	195					200						205			
Ile	Cys	Ala	Ala	Pro	Ile	Ala	Glu	Gln	Ala	Leu	Val	Pro	Glu	Ile	Pro
	210					215					220				
Gly	His	Leu	Ala	Glu	Phe	Gln	Ala	Glu	Ala	Leu	Arg	Phe	Leu	Asp	Lys
225				230						235				240	
Asp	Leu	Leu	Arg	Gly	Leu	Ala	Phe	Trp	Ala	Asp	Pro	Ser	Gly	Ile	Tyr
			245						250				255		
Ile	Arg	Trp	Leu	Gly	His	Ser	Leu	Ala	Phe	Val	Gln	Gly	Asn	Val	Glu
		260						265					270		
Ser	Thr	Gly	Ala	Val	Ala	Val	Leu	Ser	Cys	Ala	Asn	Ala	Cys	Arg	Ala
		275					280					285			
Phe	Asn	Leu	Val	Asp	Tyr	Met	Thr	Ala	Met	Ala	Arg	Thr	Ser	Pro	Asp
	290					295					300				
Gly	Ala	Ala	Leu	Pro	Gln	Ala	Cys	Val	Tyr	Leu	Tyr	Phe	Gly	Gly	Val
305				310						315				320	
Pro	Thr	Pro	Glu	Gly	Gly	Val	Gln	Ser	Thr	Val	Pro	Leu	Ile	Ile	Gln
			325						330				335		
Leu	Trp	His	Glu	Cys	Leu	Trp	Arg	Al							

<210> 120  
 <211> 762  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(762)

<400> 120  
 atg gat tct gga tgc tat gcg tgt atc ctt gat gag aac tct gaa ggg 48  
 Met Asp Ser Gly Cys Tyr Ala Cys Ile Leu Asp Glu Asn Ser Glu Gly  
           1                  5                  10                  15

att ata aat tat ttg gag cag gtg tgt ggc atc ggg tta gag ccg gga 96  
 Ile Ile Asn Tyr Leu Glu Gln Val Cys Gly Ile Gly Leu Glu Pro Gly  
                   20                  25                  30

atg ccg ctg ccc gcc ccc ttg ccc acg ttg gtc cct ccg acg aga tca 144  
 Met Pro Leu Pro Ala Pro Leu Pro Thr Leu Val Pro Pro Thr Arg Ser  
                   35                  40                  45

gcg tac gcc cga gca cat cgt ctc ggg gtc cca gaa gcg ccg ctg cct 192  
 Ala Tyr Ala Arg Ala His Arg Leu Gly Val Pro Glu Ala Pro Leu Pro  
           50                  55                  60

cat caa att gtg ccg ttt tgg cgg ttg aga att cag gtg ttt tat ttt 240  
 His Gln Ile Val Pro Phe Trp Arg Leu Arg Ile Gln Val Phe Tyr Phe  
           65                  70                  75                  80

ggc gtt ctg gca ctg gat cac acg tcc caa gat cgg aga ggt gtt cgt 288  
 Gly Val Leu Ala Leu Asp His Thr Ser Gln Asp Arg Arg Gly Val Arg  
                   85                  90                  95

ttg cat ccg cgc ccg gtt ccc cat ccc ggt cat ctg tgt ttc tat ggc 336  
 Leu His Pro Arg Pro Val Pro His Pro Gly His Leu Cys Phe Tyr Gly  
                   100                  105                  110

acc ggg ttc act gtc tgg ttt cca tct cca gat cgt gaa aaa ctg acc 384  
 Thr Gly Phe Thr Val Trp Phe Pro Ser Pro Asp Arg Glu Lys Leu Thr  
                   115                  120                  125

gca gaa cag ata acg caa ata aaa acg atg ctg gtc gcg tat aac gag 432  
 Ala Glu Gln Ile Thr Gln Ile Lys Thr Met Leu Val Ala Tyr Asn Glu  
           130                  135                  140

ggc atc tac gta cac ggc aac gaa acc gga gtg tac gtc gat aat agg 480  
 Gly Ile Tyr Val His Gly Asn Glu Thr Gly Val Tyr Val Asp Asn Arg  
           145                  150                  155                  160

aac agg gaa acg ctg tac gcg gcg ggt aac gac tgt aat ggt gat att 528  
 Asn Arg Glu Thr Leu Tyr Ala Ala Gly Asn Asp Cys Asn Gly Asp Ile  
                   165                  170                  175

atc caa cga gag gtc atg ttc ctc tct aaa cag aaa att ttt aac ttc 576  
 Ile Gln Arg Glu Val Met Phe Leu Ser Lys Gln Lys Ile Phe Asn Phe  
                   180                  185                  190

atg ggt ttc atg aga aag ctt gcc cgc tct ccg gga cca gag agc cat 624

```

Met Gly Phe Met Arg Lys Leu Ala Arg Ser Pro Gly Pro Glu Ser His
    195                      200                      205

gcg ccg tgc aac ggg gca aca ctg tat ctc tca cag cag cct ggt gcc 672
Ala Pro Cys Asn Gly Ala Thr Leu Tyr Leu Ser Gln Gln Pro Gly Ala
    210                      215                      220

caa gag agc cca caa gtt cct att tct gtg gtg gtc tgt cag gac gag 720
Gln Glu Ser Pro Gln Val Pro Ile Ser Val Val Val Cys Gln Asp Glu
    225                      230                      235                      240

ctg gtg cag gga cac atg aat cct tcc cgg tgg tgc tca taa 762
Leu Val Gln Gly His Met Asn Pro Ser Arg Trp Cys Ser
    245                      250

```

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<210> 121
<211> 253
<212> PRT
<213> Macaca mulatta rhadinovirus 17577

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<400> 121
Met Asp Ser Gly Cys Tyr Ala Cys Ile Leu Asp Glu Asn Ser Glu Gly
  1          5          10          15
Ile Ile Asn Tyr Leu Glu Gln Val Cys Gly Ile Gly Leu Glu Pro Gly
    20          25          30
Met Pro Leu Pro Ala Pro Leu Pro Thr Leu Val Pro Pro Thr Arg Ser
    35          40          45
Ala Tyr Ala Arg Ala His Arg Leu Gly Val Pro Glu Ala Pro Leu Pro
    50          55          60
His Gln Ile Val Pro Phe Trp Arg Leu Arg Ile Gln Val Phe Tyr Phe
    65          70          75          80
Gly Val Leu Ala Leu Asp His Thr Ser Gln Asp Arg Arg Gly Val Arg
    85          90          95
Leu His Pro Arg Pro Val Pro His Pro Gly His Leu Cys Phe Tyr Gly
    100         105         110
Thr Gly Phe Thr Val Trp Phe Pro Ser Pro Asp Arg Glu Lys Leu Thr
    115         120         125
Ala Glu Gln Ile Thr Gln Ile Lys Thr Met Leu Val Ala Tyr Asn Glu
    130         135         140
Gly Ile Tyr Val His Gly Asn Glu Thr Gly Val Tyr Val Asp Asn Arg
    145         150         155         160
Asn Arg Glu Thr Leu Tyr Ala Ala Gly Asn Asp Cys Asn Gly Asp Ile
    165         170         175
Ile Gln Arg Glu Val Met Phe Leu Ser Lys Gln Lys Ile Phe Asn Phe
    180         185         190
Met Gly Phe Met Arg Lys Leu Ala Arg Ser Pro Gly Pro Glu Ser His
    195         200         205
Ala Pro Cys Asn Gly Ala Thr Leu Tyr Leu Ser Gln Gln Pro Gly Ala
    210         215         220
Gln Glu Ser Pro Gln Val Pro Ile Ser Val Val Val Cys Gln Asp Glu
    225         230         235         240
Leu Val Gln Gly His Met Asn Pro Ser Arg Trp Cys Ser
    245         250

```

```

<210> 122
<211> 1158
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(1158)

&lt;400&gt; 122

atg gcc gct ggg gaa tcg aga agg ggc cca tct cgt tat ggc atg gcc	48
Met Ala Ala Gly Glu Ser Arg Arg Gly Pro Ser Arg Tyr Gly Met Ala	
1 5 10 15	
ctc aag gaa tgg ctg acg ttc aaa gcc gat agt ggt ctg tac ccg ggc	96
Leu Lys Glu Trp Leu Thr Phe Lys Ala Asp Ser Gly Leu Tyr Pro Gly	
20 25 30	
ctg ttt tgg gca gac gag caa aag acg agg ctg gtg ttg gca gct aca	144
Leu Phe Trp Ala Asp Glu Gln Lys Thr Arg Leu Val Leu Ala Ala Thr	
35 40 45	
cca ccg tcg ttt ccc aat tat gat tat caa cgc gac ggt caa cac tat	192
Pro Pro Ser Phe Pro Asn Tyr Asp Tyr Gln Arg Asp Gly Gln His Tyr	
50 55 60	
gat gcc tac tgt gag tta aga cac atc cca ctg ccg tct gga agg agc	240
Asp Ala Tyr Cys Glu Leu Arg His Ile Pro Leu Pro Ser Gly Arg Ser	
65 70 75 80	
agg ctg tgt caa gcc agg ggg cgc ctg ctg gga gcc gta aga aag agc	288
Arg Leu Cys Gln Ala Arg Gly Arg Leu Leu Gly Ala Val Arg Lys Ser	
85 90 95	
aag tac ttt gag gaa gat aag gaa ttc cct acc gat caa ttt ccg ttc	336
Lys Tyr Phe Glu Glu Asp Lys Glu Phe Pro Thr Asp Gln Phe Pro Phe	
100 105 110	
acg gcg ctg gtc ttt agg ttg cgt tca tcc gaa gag atg tct tgt ccg	384
Thr Ala Leu Val Phe Arg Leu Arg Ser Ser Glu Glu Met Ser Cys Pro	
115 120 125	
gtg tgt ccg cgc gtg tgc gcg ctc cgc ctt gag ttg cgc aat atg cgg	432
Val Cys Pro Arg Val Cys Ala Leu Arg Leu Glu Leu Arg Asn Met Arg	
130 135 140	
ttt gcc atg ctc ggg cgc gga atg ctt cac gcc ctt tcg gga ccg tcc	480
Phe Ala Met Leu Gly Arg Gly Met Leu His Ala Leu Ser Gly Pro Ser	
145 150 155 160	
gta agt gat caa gag aga cgg tat cgg gaa ggt cat caa gat gga cac	528
Val Ser Asp Gln Glu Arg Arg Tyr Arg Glu Gly His Gln Asp Gly His	
165 170 175	
gac gcg cag gac gac gat gca gcg tat tct tcg ggc ctt ctg cgc gcc	576
Asp Ala Gln Asp Asp Asp Ala Ala Tyr Ser Ser Gly Leu Leu Arg Ala	
180 185 190	
aga ctt atg gcg tgt gct gcg cca tct gcc ggc gat cca tgg ggt cac	624
Arg Leu Met Ala Cys Ala Ala Pro Ser Ala Gly Asp Pro Trp Gly His	
195 200 205	
atg cat ata aag att tat tac tat ggg caa ttg cag gct gag ctg ttg	672
Met His Ile Lys Ile Tyr Tyr Tyr Gly Gln Leu Gln Ala Glu Leu Leu	
210 215 220	

```

aca gcc acc ggg cag gga atc agg cta tct tca aaa cca aca aat aag 720
Thr Ala Thr Gly Gln Gly Ile Arg Leu Ser Ser Lys Pro Thr Asn Lys
225                230                235                240

gcg gga cac cac gtg tgt gtt ttg gat gga ccc ctt cag gcg tgg ttt 768
Ala Gly His His Val Cys Val Leu Asp Gly Pro Leu Gln Ala Trp Phe
                245                250                255

cct ccg ata cca cag acg act gag tcg tct gtg gtg cag aga ctc gag 816
Pro Pro Ile Pro Gln Thr Thr Glu Ser Ser Val Val Gln Arg Leu Glu
                260                265                270

gac gct ttg aaa tgg ctc gtg gat gga ata att ttc tgc agc acc agc 864
Asp Ala Leu Lys Trp Leu Val Asp Gly Ile Ile Phe Cys Ser Thr Ser
                275                280                285

agg gga att atg ttc acg att acc ggg ggt cct aac gtg tgg ttt cag 912
Arg Gly Ile Met Phe Thr Ile Thr Gly Gly Pro Asn Val Trp Phe Gln
                290                295                300

gga aat acc gtg gaa ccg tac agt ttg cca cat cgt gcc tac acc ggg 960
Gly Asn Thr Val Glu Pro Tyr Ser Leu Pro His Arg Ala Tyr Thr Gly
305                310                315                320

atg cac gtg tgg gca ttt gac act gat cgt tat ttg ctt gat atg gcc 1008
Met His Val Trp Ala Phe Asp Thr Asp Arg Tyr Leu Leu Asp Met Ala
                325                330                335

agg tcc ccc tcc ccg cgc gac acg ggt ccc ccc gcg gcc ttt gtt aaa 1056
Arg Ser Pro Ser Pro Arg Asp Thr Gly Pro Pro Ala Ala Phe Val Lys
                340                345                350

ctc tgg gtt tcg ggt tgt tcc ctg ggc gag gag cga aac tct tcg agg 1104
Leu Trp Val Ser Gly Cys Ser Leu Gly Glu Glu Arg Asn Ser Ser Arg
                355                360                365

gct cca cta tct att att gtt tat caa aca gaa atc tat agg cac ttt 1152
Ala Pro Leu Ser Ile Ile Val Tyr Gln Thr Glu Ile Tyr Arg His Phe
                370                375                380

gaa taa 1158
Glu
385

```

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<210> 123
<211> 385
<212> PRT
<213> Macaca mulatta rhadinovirus 17577

```

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<400> 123
Met Ala Ala Gly Glu Ser Arg Arg Gly Pro Ser Arg Tyr Gly Met Ala
 1          5          10          15
Leu Lys Glu Trp Leu Thr Phe Lys Ala Asp Ser Gly Leu Tyr Pro Gly
          20          25          30
Leu Phe Trp Ala Asp Glu Gln Lys Thr Arg Leu Val Leu Ala Ala Thr
          35          40          45
Pro Pro Ser Phe Pro Asn Tyr Asp Tyr Gln Arg Asp Gly Gln His Tyr
          50          55          60
Asp Ala Tyr Cys Glu Leu Arg His Ile Pro Leu Pro Ser Gly Arg Ser

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      65              70              75              80
Arg Leu Cys Gln Ala Arg Gly Arg Leu Leu Gly Ala Val Arg Lys Ser
      85              90              95
Lys Tyr Phe Glu Glu Asp Lys Glu Phe Pro Thr Asp Gln Phe Pro Phe
      100             105             110
Thr Ala Leu Val Phe Arg Leu Arg Ser Ser Glu Glu Met Ser Cys Pro
      115             120             125
Val Cys Pro Arg Val Cys Ala Leu Arg Leu Glu Leu Arg Asn Met Arg
      130             135             140
Phe Ala Met Leu Gly Arg Gly Met Leu His Ala Leu Ser Gly Pro Ser
      145             150             155             160
Val Ser Asp Gln Glu Arg Arg Tyr Arg Glu Gly His Gln Asp Gly His
      165             170             175
Asp Ala Gln Asp Asp Ala Ala Tyr Ser Ser Gly Leu Leu Arg Ala
      180             185             190
Arg Leu Met Ala Cys Ala Ala Pro Ser Ala Gly Asp Pro Trp Gly His
      195             200             205
Met His Ile Lys Ile Tyr Tyr Tyr Gly Gln Leu Gln Ala Glu Leu Leu
      210             215             220
Thr Ala Thr Gly Gln Gly Ile Arg Leu Ser Ser Lys Pro Thr Asn Lys
      225             230             235             240
Ala Gly His His Val Cys Val Leu Asp Gly Pro Leu Gln Ala Trp Phe
      245             250             255
Pro Pro Ile Pro Gln Thr Thr Glu Ser Ser Val Val Gln Arg Leu Glu
      260             265             270
Asp Ala Leu Lys Trp Leu Val Asp Gly Ile Ile Phe Cys Ser Thr Ser
      275             280             285
Arg Gly Ile Met Phe Thr Ile Thr Gly Gly Pro Asn Val Trp Phe Gln
      290             295             300
Gly Asn Thr Val Glu Pro Tyr Ser Leu Pro His Arg Ala Tyr Thr Gly
      305             310             315             320
Met His Val Trp Ala Phe Asp Thr Asp Arg Tyr Leu Leu Asp Met Ala
      325             330             335
Arg Ser Pro Ser Pro Arg Asp Thr Gly Pro Pro Ala Ala Phe Val Lys
      340             345             350
Leu Trp Val Ser Gly Cys Ser Leu Gly Glu Glu Arg Asn Ser Ser Arg
      355             360             365
Ala Pro Leu Ser Ile Ile Val Tyr Gln Thr Glu Ile Tyr Arg His Phe
      370             375             380
Glu
      385

```

```

<210> 124
<211> 1173
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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<220>
<221> CDS
<222> (1)..(1173)

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<400> 124
atg gcg gaa cgc gat atg gat tta aaa gct tgg ttc atc gag gcc gtg 48
Met Ala Glu Arg Asp Met Asp Leu Lys Ala Trp Phe Ile Glu Ala Val
      1              5              10              15

gag tct aag cga tac ccc gga gtg gaa tgg gat gac gag gac aag acc 96
Glu Ser Lys Arg Tyr Pro Gly Val Glu Trp Asp Asp Glu Asp Lys Thr
      20              25              30

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att ata cgt gtc ccg tgg aac cgg tgc acc gac agt cgc gtc gat gaa	144
Ile Ile Arg Val Pro Trp Asn Arg Cys Thr Asp Ser Arg Val Asp Glu	
35 40 45	
gat tat aac aag ata ttt gac gat ttt tgc tca gcg cgt ggc gtg tgt	192
Asp Tyr Asn Lys Ile Phe Asp Asp Phe Cys Ser Ala Arg Gly Val Cys	
50 55 60	
caa acc ggt tca cat gcc cag aaa ttt aag aaa att agg atg tta tat	240
Gln Thr Gly Ser His Ala Gln Lys Phe Lys Lys Ile Arg Met Leu Tyr	
65 70 75 80	
gca gtg aga tct cac agg tat ttg agg gag ctg aca ccg ccg agc aag	288
Ala Val Arg Ser His Arg Tyr Leu Arg Glu Leu Thr Pro Pro Ser Lys	
85 90 95	
gcc ggg ggc gtc tct ggg gaa aga tac aga ctc ttt caa ttg ctt cct	336
Ala Gly Gly Val Ser Gly Glu Arg Tyr Arg Leu Phe Gln Leu Leu Pro	
100 105 110	
gag gtt acg gtg ggc tgc gat ctg tgt aac ctc atc gcg acc aca tcg	384
Glu Val Thr Val Gly Cys Asp Leu Cys Asn Leu Ile Ala Thr Thr Ser	
115 120 125	
ttg cat agc tgt tcc atg ggc agt tgc gtt cga gag gat gtt ttc gag	432
Leu His Ser Cys Ser Met Gly Ser Cys Val Arg Glu Asp Val Phe Glu	
130 135 140	
agg aca cgg cgg ccg agg gct aag gcg cca ctg aga gtc tcc gtt tat	480
Arg Thr Arg Arg Pro Arg Ala Lys Ala Pro Leu Arg Val Ser Val Tyr	
145 150 155 160	
aaa cgg aaa tcc aaa cga ctc cag gac tct tct gcg caa cct gtg cta	528
Lys Arg Lys Ser Lys Arg Leu Gln Asp Ser Ser Ala Gln Pro Val Leu	
165 170 175	
ggg gct gtt gag gta tcc ttt ttt tac ttt gga gag aac gtc gga gtt	576
Gly Ala Val Glu Val Ser Phe Phe Tyr Phe Gly Glu Asn Val Gly Val	
180 185 190	
caa att ttg cga gcc ggc tcg ggt gtg cgt ata tgt ggc ctt cct gat	624
Gln Ile Leu Arg Ala Gly Ser Gly Val Arg Ile Cys Gly Leu Pro Asp	
195 200 205	
ccc aaa cgt ccc gga cac ctg tgt tgt gcc gat aat cca ttg acg tgt	672
Pro Lys Arg Pro Gly His Leu Cys Cys Ala Asp Asn Pro Leu Thr Cys	
210 215 220	
ttc ttg ccg tcg tcc cag ttg att ccc tgc gag ttt gcc agg gca gat	720
Phe Leu Pro Ser Ser Gln Leu Ile Pro Cys Glu Phe Ala Arg Ala Asp	
225 230 235 240	
ttg cag gcc ctg cag aaa aca tgc gag aga ggt ttg atc tgt gtt atg	768
Leu Gln Ala Leu Gln Lys Thr Cys Glu Arg Gly Leu Ile Cys Val Met	
245 250 255	
acg gag tct gga atc tgt gtg aaa aac ctg gaa gaa cgc aac atg acg	816
Thr Glu Ser Gly Ile Cys Val Lys Asn Leu Glu Glu Arg Asn Met Thr	
260 265 270	

gca ttg acc aac tat tct gaa aat tac tat gag ctg cgg cct tcg cag 864  
Ala Leu Thr Asn Tyr Ser Glu Asn Tyr Tyr Glu Leu Arg Pro Ser Gln  
275 280 285

ccg ctc cag gcg ttc gat ctc ttg cat tat ttg agg gag ctg gcg aga 912  
Pro Leu Gln Ala Phe Asp Leu Leu His Tyr Leu Arg Glu Leu Ala Arg  
290 295 300

tcg cca act cca gga gat gtc ccg ccg cgt gac tgt gcg tgg att ttc 960  
Ser Pro Thr Pro Gly Asp Val Pro Pro Arg Asp Cys Ala Trp Ile Phe  
305 310 315 320

atg tgc ccg tct act cag tcc gaa aat aca tgg gat gct ccc att gcc 1008  
Met Cys Pro Ser Thr Gln Ser Glu Asn Thr Trp Asp Ala Pro Ile Ala  
325 330 335

ctg aaa ctt cgc tac gtg tgc aat gat gat gtg tca gat gat gtc agc 1056  
Leu Lys Leu Arg Tyr Val Cys Asn Asp Asp Val Ser Asp Asp Val Ser  
340 345 350

aac ggt gcc gcg gga gat gac agc ggg gac gag gga ccg tct gga gcg 1104  
Asn Gly Ala Ala Gly Asp Asp Ser Gly Asp Glu Gly Pro Ser Gly Ala  
355 360 365

ggg gtc ggt gct tcg gga aca acg gga agc aca tct gta tct acc ctc 1152  
Gly Val Gly Ala Ser Gly Thr Gly Ser Thr Ser Val Ser Thr Leu  
370 375 380

gca ccg tat ggg agg aag taa 1173  
Ala Pro Tyr Gly Arg Lys  
385 390

&lt;210&gt; 125

&lt;211&gt; 390

&lt;212&gt; PRT

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 125

Met Ala Glu Arg Asp Met Asp Leu Lys Ala Trp Phe Ile Glu Ala Val  
1 5 10 15  
Glu Ser Lys Arg Tyr Pro Gly Val Glu Trp Asp Asp Glu Asp Lys Thr  
20 25 30  
Ile Ile Arg Val Pro Trp Asn Arg Cys Thr Asp Ser Arg Val Asp Glu  
35 40 45  
Asp Tyr Asn Lys Ile Phe Asp Asp Phe Cys Ser Ala Arg Gly Val Cys  
50 55 60  
Gln Thr Gly Ser His Ala Gln Lys Phe Lys Lys Ile Arg Met Leu Tyr  
65 70 75 80  
Ala Val Arg Ser His Arg Tyr Leu Arg Glu Leu Thr Pro Pro Ser Lys  
85 90 95  
Ala Gly Gly Val Ser Gly Glu Arg Tyr Arg Leu Phe Gln Leu Leu Pro  
100 105 110  
Glu Val Thr Val Gly Cys Asp Leu Cys Asn Leu Ile Ala Thr Thr Ser  
115 120 125  
Leu His Ser Cys Ser Met Gly Ser Cys Val Arg Glu Asp Val Phe Glu  
130 135 140  
Arg Thr Arg Arg Pro Arg Ala Lys Ala Pro Leu Arg Val Ser Val Tyr  
145 150 155 160  
Lys Arg Lys Ser Lys Arg Leu Gln Asp Ser Ser Ala Gln Pro Val Leu  
165 170 175



Gly Ala Val Glu Val Ser Phe Phe Tyr Phe Gly Glu Asn Val Gly Val  
 180 185 190  
 Gln Ile Leu Arg Ala Gly Ser Gly Val Arg Ile Cys Gly Leu Pro Asp  
 195 200 205  
 Pro Lys Arg Pro Gly His Leu Cys Cys Ala Asp Asn Pro Leu Thr Cys  
 210 215 220  
 Phe Leu Pro Ser Ser Gln Leu Ile Pro Cys Glu Phe Ala Arg Ala Asp  
 225 230 235 240  
 Leu Gln Ala Leu Gln Lys Thr Cys Glu Arg Gly Leu Ile Cys Val Met  
 245 250 255  
 Thr Glu Ser Gly Ile Cys Val Lys Asn Leu Glu Glu Arg Asn Met Thr  
 260 265 270  
 Ala Leu Thr Asn Tyr Ser Glu Asn Tyr Tyr Glu Leu Arg Pro Ser Gln  
 275 280 285  
 Pro Leu Gln Ala Phe Asp Leu Leu His Tyr Leu Arg Glu Leu Ala Arg  
 290 295 300  
 Ser Pro Thr Pro Gly Asp Val Pro Pro Arg Asp Cys Ala Trp Ile Phe  
 305 310 315 320  
 Met Cys Pro Ser Thr Gln Ser Glu Asn Thr Trp Asp Ala Pro Ile Ala  
 325 330 335  
 Leu Lys Leu Arg Tyr Val Cys Asn Asp Asp Val Ser Asp Asp Val Ser  
 340 345 350  
 Asn Gly Ala Ala Gly Asp Asp Ser Gly Asp Glu Gly Pro Ser Gly Ala  
 355 360 365  
 Gly Val Gly Ala Ser Gly Thr Thr Gly Ser Thr Ser Val Ser Thr Leu  
 370 375 380  
 Ala Pro Tyr Gly Arg Lys  
 385 390

<210> 126  
 <211> 1068  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(1068)

<400> 126  
 atg gcg gaa gga cgg gca ggg tcg atc cgc gta aac cgg ccg tct ggc 48  
 Met Ala Glu Gly Arg Ala Gly Ser Ile Arg Val Asn Arg Pro Ser Gly  
 1 5 10 15  
 ctg agg gca tgg ttg ctc gat tgt tgc gat aat gat aag cat cct gga 96  
 Leu Arg Ala Trp Leu Leu Asp Cys Cys Asp Asn Asp Lys His Pro Gly  
 20 25 30  
 atg cat tgg ctg gat gag gaa aag act ctg gtt cgt tta cct tgg aat 144  
 Met His Trp Leu Asp Glu Glu Lys Thr Leu Val Arg Leu Pro Trp Asn  
 35 40 45  
 cat tta aag ggc gcg ggt ggc gtc tct gac gat gag aga aac atg tat 192  
 His Leu Lys Gly Ala Gly Gly Val Ser Asp Asp Glu Arg Asn Met Tyr  
 50 55 60  
 ctg gac tat tgt caa ttt aaa ggc ata cgg cag acc ggt aac aga cga 240  
 Leu Asp Tyr Cys Gln Phe Lys Gly Ile Arg Gln Thr Gly Asn Arg Arg  
 65 70 75 80

ttg agc gtc agg gaa tgt aag aac tgg ttg gcc agc gct ata cgc cac	288
Leu Ser Val Arg Glu Cys Lys Asn Trp Leu Ala Ser Ala Ile Arg His	
85 90 95	
agt cag acc gtc gaa gat gta tcc act gag gag aac ctg tcg gcg ccg	336
Ser Gln Thr Val Glu Asp Val Ser Thr Glu Glu Asn Leu Ser Ala Pro	
100 105 110	
gcg cct aac agg tgc cgc gtt att cgc ctg ttg ccg atc ttt gta cga	384
Ala Pro Asn Arg Cys Arg Val Ile Arg Leu Leu Pro Ile Phe Val Arg	
115 120 125	
tct tgc ccg ctc tgt aac gaa gcg gat gcc acc ggc ggc atg ctc ctg	432
Ser Cys Pro Leu Cys Asn Glu Ala Asp Ala Thr Gly Gly Met Leu Leu	
130 135 140	
gac gta cgc aac gag gta acc gcc aga ttc cgg tat ctc ggt gcc ggg	480
Asp Val Arg Asn Glu Val Thr Ala Arg Phe Arg Tyr Leu Gly Ala Gly	
145 150 155 160	
atg gag tac gaa ggc gcc gtg gga ggc gac ggg gag cag tgt tgg atg	528
Met Glu Tyr Glu Gly Ala Val Gly Gly Asp Gly Glu Gln Cys Trp Met	
165 170 175	
cta cgg ctg gtt gtt tat tac tat ggg cgg ttg gtt ggg aac atg gag	576
Leu Arg Leu Val Val Tyr Tyr Tyr Gly Arg Leu Val Gly Asn Met Glu	
180 185 190	
gtc ggg tcg ccc aac ggc gtt cgc ctg ttg ccg gcg cca aag cga cca	624
Val Gly Ser Pro Asn Gly Val Arg Leu Leu Pro Ala Pro Lys Arg Pro	
195 200 205	
ctg caa gga cac gtt tgt gcg ggc att cgg ccg gaa cag gcc ctg ttg	672
Leu Gln Gly His Val Cys Ala Gly Ile Arg Pro Glu Gln Ala Leu Leu	
210 215 220	
ccg cat acc cca cag gat atg ttt cct cac cag acg agc atg cta aag	720
Pro His Thr Pro Gln Asp Met Phe Pro His Gln Thr Ser Met Leu Lys	
225 230 235 240	
tgg ctg ggg aag gag atc ata cgc ggg ttg atg att tac gca gac ggg	768
Trp Leu Gly Lys Glu Ile Ile Arg Gly Leu Met Ile Tyr Ala Asp Gly	
245 250 255	
tct ggg att tac att cgg tat atg ggt cac gtt cca gcc ttc ctg ctg	816
Ser Gly Ile Tyr Ile Arg Tyr Met Gly His Val Pro Ala Phe Leu Leu	
260 265 270	
ggt aac gga ggt tcg ctg gag ccg gtg gat ata att aac aac gcg cga	864
Gly Asn Gly Gly Ser Leu Glu Pro Val Asp Ile Ile Asn Asn Ala Arg	
275 280 285	
gtt ctg cgc gtg ttt tcg ctc gcc caa tat ctg agt gcg gtg tca gcc	912
Val Leu Arg Val Phe Ser Leu Ala Gln Tyr Leu Ser Ala Val Ser Ala	
290 295 300	
acc ccg cca cac gga acg cga ttt cca gcc gcc tat gcg tct ctc cac	960
Thr Pro Pro His Gly Thr Arg Phe Pro Ala Ala Tyr Ala Ser Leu His	
305 310 315 320	
cta gga ggc gtt ccc act ccg gaa ggc gag ccg tgt ccc aca atc ccc	1008

Leu Gly Gly Val Pro Thr Pro Glu Gly Glu Pro Cys Pro Thr Ile Pro  
 325 330 335

ctg tcc att caa att tgg cac gag tgt ctg tgg cgg gcg tgc ggg gat 1056  
 Leu Ser Ile Gln Ile Trp His Glu Cys Leu Trp Arg Ala Cys Gly Asp  
 340 345 350

gcg gcc cag tga 1068  
 Ala Ala Gln  
 355

<210> 127  
 <211> 355  
 <212> PRT  
 <213> Macaca mulatta rhadinovirus 17577

<400> 127  
 Met Ala Glu Gly Arg Ala Gly Ser Ile Arg Val Asn Arg Pro Ser Gly  
 1 5 10 15  
 Leu Arg Ala Trp Leu Leu Asp Cys Cys Asp Asn Asp Lys His Pro Gly  
 20 25 30  
 Met His Trp Leu Asp Glu Glu Lys Thr Leu Val Arg Leu Pro Trp Asn  
 35 40 45  
 His Leu Lys Gly Ala Gly Gly Val Ser Asp Asp Glu Arg Asn Met Tyr  
 50 55 60  
 Leu Asp Tyr Cys Gln Phe Lys Gly Ile Arg Gln Thr Gly Asn Arg Arg  
 65 70 75 80  
 Leu Ser Val Arg Glu Cys Lys Asn Trp Leu Ala Ser Ala Ile Arg His  
 85 90 95  
 Ser Gln Thr Val Glu Asp Val Ser Thr Glu Glu Asn Leu Ser Ala Pro  
 100 105 110  
 Ala Pro Asn Arg Cys Arg Val Ile Arg Leu Leu Pro Ile Phe Val Arg  
 115 120 125  
 Ser Cys Pro Leu Cys Asn Glu Ala Asp Ala Thr Gly Gly Met Leu Leu  
 130 135 140  
 Asp Val Arg Asn Glu Val Thr Ala Arg Phe Arg Tyr Leu Gly Ala Gly  
 145 150 155 160  
 Met Glu Tyr Glu Gly Ala Val Gly Gly Asp Gly Glu Gln Cys Trp Met  
 165 170 175  
 Leu Arg Leu Val Val Tyr Tyr Tyr Gly Arg Leu Val Gly Asn Met Glu  
 180 185 190  
 Val Gly Ser Pro Asn Gly Val Arg Leu Leu Pro Ala Pro Lys Arg Pro  
 195 200 205  
 Leu Gln Gly His Val Cys Ala Gly Ile Arg Pro Glu Gln Ala Leu Leu  
 210 215 220  
 Pro His Thr Pro Gln Asp Met Phe Pro His Gln Thr Ser Met Leu Lys  
 225 230 235 240  
 Trp Leu Gly Lys Glu Ile Ile Arg Gly Leu Met Ile Tyr Ala Asp Gly  
 245 250 255  
 Ser Gly Ile Tyr Ile Arg Tyr Met Gly His Val Pro Ala Phe Leu Leu  
 260 265 270  
 Gly Asn Gly Gly Ser Leu Glu Pro Val Asp Ile Ile Asn Asn Ala Arg  
 275 280 285  
 Val Leu Arg Val Phe Ser Leu Ala Gln Tyr Leu Ser Ala Val Ser Ala  
 290 295 300  
 Thr Pro Pro His Gly Thr Arg Phe Pro Ala Ala Tyr Ala Ser Leu His  
 305 310 315 320  
 Leu Gly Gly Val Pro Thr Pro Glu Gly Glu Pro Cys Pro Thr Ile Pro  
 325 330 335  
 Leu Ser Ile Gln Ile Trp His Glu Cys Leu Trp Arg Ala Cys Gly Asp

Ala Ala Gln  
355

345

350

<210> 128  
<211> 1095  
<212> DNA  
<213> Macaca mulatta rhadinovirus 17577

<220>  
<221> CDS  
<222> (1)..(1095)

<400> 128  
atg acc gag ata gaa atc act cac aat cac ctg cga aga tgg att att 48  
Met Thr Glu Ile Glu Ile Thr His Asn His Leu Arg Arg Trp Ile Ile  
1 5 10 15  
tcc aat ttg gaa gcg aac acg ttt ccc gaa cac ttg tgt tgg tgc gac 96  
Ser Asn Leu Glu Ala Asn Thr Phe Pro Glu His Leu Cys Trp Cys Asp  
20 25 30  
gag gaa aag agg agc ttt agg ata tca tgg cac cga ggt atg agt ggc 144  
Glu Glu Lys Arg Ser Phe Arg Ile Ser Trp His Arg Gly Met Ser Gly  
35 40 45  
atg caa cct gtg gtt gcg tac tgc ctg gat agg gat ctg gaa tgt gga 192  
Met Gln Pro Val Val Ala Tyr Cys Leu Asp Arg Asp Leu Glu Cys Gly  
50 55 60  
cgc cag cac aac gtg tcg gag tgc cgg aaa aga ctg cta agg gtg ctt 240  
Arg Gln His Asn Val Ser Glu Cys Arg Lys Arg Leu Leu Arg Val Leu  
65 70 75 80  
cgg gaa aac gct ggg ttt gaa cag gac gat gcc cgg gca aca aca acg 288  
Arg Glu Asn Ala Gly Phe Glu Gln Asp Asp Ala Arg Ala Thr Thr Thr  
85 90 95  
cgt ttt ggc gga gaa aga ttt ttt tac ttg aga ccc gcc gtg gat ccg 336  
Arg Phe Gly Gly Glu Arg Phe Phe Tyr Leu Arg Pro Ala Val Asp Pro  
100 105 110  
ctg tgt tat gcc tgc atc tta gat agt cat tcg gag acc gtc cta aat 384  
Leu Cys Tyr Ala Cys Ile Leu Asp Ser His Ser Glu Thr Val Leu Asn  
115 120 125  
tac tta gag gcg gcc tgc gtc cat ggg ctt gag cca ggg acg ccc ctg 432  
Tyr Leu Glu Ala Ala Cys Val His Gly Leu Glu Pro Gly Thr Pro Leu  
130 135 140  
cct cct ccc gct ccg gcg gag gct gac ggt gcg gcg cgg tcc gta tat 480  
Pro Pro Pro Ala Pro Ala Glu Ala Asp Gly Ala Ala Arg Ser Val Tyr  
145 150 155 160  
gcc agg gcc gcc agg ttg gcg acg gtt gca cca ccg cat cca gac cag 528  
Ala Arg Ala Ala Arg Leu Ala Thr Val Ala Pro Pro His Pro Asp Gln  
165 170 175  
atc act cca ttt tgg cgg cta cgt ata cga gtt ttt tat ttt ggg tcg 576

Ile	Thr	Pro	Phe	Trp	Arg	Leu	Arg	Ile	Arg	Val	Phe	Tyr	Phe	Gly	Ser		
			180					185					190				
ctg	gta	gcg	gaa	cac	acg	tcc	cag	gac	cgt	aga	ggg	gta	cga	ttg	cat	624	
Leu	Val	Ala	Glu	His	Thr	Ser	Gln	Asp	Arg	Arg	Gly	Val	Arg	Leu	His		
		195					200				205						
aag	cgc	caa	gac	ccc	aaa	ccg	ggg	cac	gag	tgt	ttc	tat	ggg	aca	gcg	672	
Lys	Arg	Gln	Asp	Pro	Lys	Pro	Gly	His	Glu	Cys	Phe	Tyr	Gly	Thr	Ala		
		210				215					220						
tat	aag	atg	tgg	ctt	cca	aaa	cct	cag	ttg	gat	ggg	ccg	cta	acg	ccg	720	
Tyr	Lys	Met	Trp	Leu	Pro	Lys	Pro	Gln	Leu	Asp	Gly	Pro	Leu	Thr	Pro		
225					230					235					240		
gag	cag	aga	gaa	acc	gtg	tgt	gag	att	ata	aac	ggg	tgt	gag	gag	ggc	768	
Glu	Gln	Arg	Glu	Thr	Val	Cys	Glu	Ile	Ile	Asn	Gly	Cys	Glu	Glu	Gly		
				245					250					255			
gtc	ttt	ttg	cat	ggc	aat	gag	ctg	ggg	atg	tat	gtg	gat	aac	aga	acc	816	
Val	Phe	Leu	His	Gly	Asn	Glu	Leu	Gly	Met	Tyr	Val	Asp	Asn	Arg	Thr		
			260					265					270				
agg	cac	acg	gtt	cgc	tgc	gca	ggg	aac	gac	gca	gag	ggg	aac	cac	gca	864	
Arg	His	Thr	Val	Arg	Cys	Ala	Gly	Asn	Asp	Ala	Glu	Gly	Asn	His	Ala		
		275					280					285					
caa	cgg	gct	gtg	cga	tcc	tct	gtc	aaa	tct	caa	atc	ttc	tat	gtt	atg	912	
Gln	Arg	Ala	Val	Arg	Ser	Ser	Val	Lys	Ser	Gln	Ile	Phe	Tyr	Val	Met		
		290				295					300						
ggg	cta	ctg	cgc	aga	ctc	gcc	cgg	tca	ccc	gtt	ccc	ggc	gac	act	gtt	960	
Gly	Leu	Leu	Arg	Arg	Leu	Ala	Arg	Ser	Pro	Val	Pro	Gly	Asp	Thr	Val		
305					310					315					320		
ccc	agc	aac	gca	gtc	act	ctt	tac	ctt	ggg	ggg	cgc	cct	ggc	tcc	agt	1008	
Pro	Ser	Asn	Ala	Val	Thr	Leu	Tyr	Leu	Gly	Gly	Arg	Pro	Gly	Ser	Ser		
				325					330					335			
aaa	aga	ccc	cag	gtc	cct	gtc	act	ttg	gtg	atc	tgt	cag	gat	gaa	ttg	1056	
Lys	Arg	Pro	Gln	Val	Pro	Val	Thr	Leu	Val	Ile	Cys	Gln	Asp	Glu	Leu		
			340					345					350				
act	cat	ggg	gac	att	cgg	gcg	gct	cgg	tgg	att	ttg	tag				1095	
Thr	His	Gly	Asp	Ile	Arg	Ala	Ala	Arg	Trp	Ile	Leu						
		355					360				365						

&lt;210&gt; 129

&lt;211&gt; 364

&lt;212&gt; PRT

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 129

Met	Thr	Glu	Ile	Glu	Ile	Thr	His	Asn	His	Leu	Arg	Arg	Trp	Ile	Ile		
1			5						10					15			
Ser	Asn	Leu	Glu	Ala	Asn	Thr	Phe	Pro	Glu	His	Leu	Cys	Trp	Cys	Asp		
			20					25					30				
Glu	Glu	Lys	Arg	Ser	Phe	Arg	Ile	Ser	Trp	His	Arg	Gly	Met	Ser	Gly		
		35					40					45					
Met	Gln	Pro	Val	Val	Ala	Tyr	Cys	Leu	Asp	Arg	Asp	Leu	Glu	Cys	Gly		

50		55		60											
Arg	Gln	His	Asn	Val	Ser	Glu	Cys	Arg	Lys	Arg	Leu	Leu	Arg	Val	Leu
65					70					75					80
Arg	Glu	Asn	Ala	Gly	Phe	Glu	Gln	Asp	Asp	Ala	Arg	Ala	Thr	Thr	Thr
				85					90					95	
Arg	Phe	Gly	Gly	Glu	Arg	Phe	Phe	Tyr	Leu	Arg	Pro	Ala	Val	Asp	Pro
			100					105					110		
Leu	Cys	Tyr	Ala	Cys	Ile	Leu	Asp	Ser	His	Ser	Glu	Thr	Val	Leu	Asn
		115					120					125			
Tyr	Leu	Glu	Ala	Ala	Cys	Val	His	Gly	Leu	Glu	Pro	Gly	Thr	Pro	Leu
		130				135					140				
Pro	Pro	Pro	Ala	Pro	Ala	Glu	Ala	Asp	Gly	Ala	Ala	Arg	Ser	Val	Tyr
145					150					155					160
Ala	Arg	Ala	Ala	Arg	Leu	Ala	Thr	Val	Ala	Pro	Pro	His	Pro	Asp	Gln
				165					170					175	
Ile	Thr	Pro	Phe	Trp	Arg	Leu	Arg	Ile	Arg	Val	Phe	Tyr	Phe	Gly	Ser
			180					185					190		
Leu	Val	Ala	Glu	His	Thr	Ser	Gln	Asp	Arg	Arg	Gly	Val	Arg	Leu	His
		195					200					205			
Lys	Arg	Gln	Asp	Pro	Lys	Pro	Gly	His	Glu	Cys	Phe	Tyr	Gly	Thr	Ala
	210				215						220				
Tyr	Lys	Met	Trp	Leu	Pro	Lys	Pro	Gln	Leu	Asp	Gly	Pro	Leu	Thr	Pro
225					230					235					240
Glu	Gln	Arg	Glu	Thr	Val	Cys	Glu	Ile	Ile	Asn	Gly	Cys	Glu	Glu	Gly
			245						250					255	
Val	Phe	Leu	His	Gly	Asn	Glu	Leu	Gly	Met	Tyr	Val	Asp	Asn	Arg	Thr
		260						265					270		
Arg	His	Thr	Val	Arg	Cys	Ala	Gly	Asn	Asp	Ala	Glu	Gly	Asn	His	Ala
		275					280					285			
Gln	Arg	Ala	Val	Arg	Ser	Ser	Val	Lys	Ser	Gln	Ile	Phe	Tyr	Val	Met
	290				295					300					
Gly	Leu	Leu	Arg	Arg	Leu	Ala	Arg	Ser	Pro	Val	Pro	Gly	Asp	Thr	Val
305					310					315					320
Pro	Ser	Asn	Ala	Val	Thr	Leu	Tyr	Leu	Gly	Gly	Arg	Pro	Gly	Ser	Ser
			325						330					335	
Lys	Arg	Pro	Gln	Val	Pro	Val	Thr	Leu	Val	Ile	Cys	Gln	Asp	Glu	Leu
		340					345						350		
Thr	His	Gly	Asp	Ile	Arg	Ala	Ala	Arg	Trp	Ile	Leu				
	355						360								

<210> 130  
 <211> 1083  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
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 <222> (1)..(1083)

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Met Gly Thr Tyr Thr Ser Glu Ala Ser Leu Ala Trp Leu Ser Phe Met	
1 5 10 15	
agc ggg acg gtc tcg gct tcc ccg ttt att ctg tgt ttt att tat cac	96
Ser Gly Thr Val Ser Ala Ser Pro Phe Ile Leu Cys Phe Ile Tyr His	
20 25 30	
tcg ctg tat ttt gta gag ccc ctg att agc gtt gag aac att ata ttc	144

Ser	Leu	Tyr	Phe	Val	Glu	Pro	Leu	Ile	Ser	Val	Glu	Asn	Ile	Ile	Phe	
		35					40					45				
tcc	tgg	ggc	gcg	gtt	ggc	tta	cat	ggg	ctg	ctt	ttg	cta	ttc	tgt	ata	192
Ser	Trp	Gly	Ala	Val	Gly	Leu	His	Gly	Leu	Leu	Leu	Leu	Phe	Cys	Ile	
	50					55					60					
ttt	ggg	cta	ccg	gcc	tgg	ctc	tcg	cgg	cag	gtg	gat	gta	ccg	tgc	acc	240
Phe	Gly	Leu	Pro	Ala	Trp	Leu	Ser	Arg	Gln	Val	Asp	Val	Pro	Cys	Thr	
	65				70					75					80	
atc	tcg	gcg	ttt	ctt	att	acc	gcc	ggg	tct	atg	gca	tcc	acc	ctc	ggc	288
Ile	Ser	Ala	Phe	Leu	Ile	Thr	Ala	Gly	Ser	Met	Ala	Ser	Thr	Leu	Gly	
				85					90					95		
gtt	gac	ctt	cca	tgg	gtt	cac	gtt	tcc	att	ttt	gtg	ggg	tcg	tgc	ctg	336
Val	Asp	Leu	Pro	Trp	Val	His	Val	Ser	Ile	Phe	Val	Gly	Ser	Cys	Leu	
			100					105					110			
tgc	ctg	ctg	ctc	tgt	gtt	gtt	gcg	gcg	aat	gac	gtg	gta	tat	ttg	tgc	384
Cys	Leu	Leu	Leu	Cys	Val	Val	Ala	Ala	Asn	Asp	Val	Val	Tyr	Leu	Cys	
		115					120					125				
ccc	acg	att	gcc	cac	aga	tac	tac	gaa	ctt	gga	ttt	tta	gca	gcg	ttc	432
Pro	Thr	Ile	Ala	His	Arg	Tyr	Tyr	Glu	Leu	Gly	Phe	Leu	Ala	Ala	Phe	
		130				135						140				
tcg	gtg	tat	tat	ttt	tta	gtt	ctt	aag	aac	ctt	ttt	tta	gcc	ccg	gtg	480
Ser	Val	Tyr	Tyr	Phe	Leu	Val	Leu	Lys	Asn	Leu	Phe	Leu	Ala	Pro	Val	
	145				150					155					160	
ttt	ttg	ctg	ccc	ctg	gtg	gcc	ttt	ata	gta	ggg	ggc	gtt	tgt	tca	ctc	528
Phe	Leu	Leu	Pro	Leu	Val	Ala	Phe	Ile	Val	Gly	Gly	Val	Cys	Ser	Leu	
			165						170				175			
aga	gcg	ctg	cgg	tca	cat	ccg	ctt	tat	gag	gcg	ggc	ctg	cag	cga	cgc	576
Arg	Ala	Leu	Arg	Ser	His	Pro	Leu	Tyr	Glu	Ala	Gly	Leu	Gln	Arg	Arg	
			180					185					190			
cat	gca	att	ttt	tcg	ctc	acc	tct	agg	cgg	tac	atc	aca	tac	tct	ata	624
His	Ala	Ile	Phe	Ser	Leu	Thr	Ser	Arg	Arg	Tyr	Ile	Thr	Tyr	Ser	Ile	
		195					200					205				
aag	caa	gcg	ctt	gag	gtg	tgt	gga	tgg	gac	ttt	tat	ctc	gtg	act	gtt	672
Lys	Gln	Ala	Leu	Glu	Val	Cys	Gly	Trp	Asp	Phe	Tyr	Leu	Val	Thr	Val	
	210					215					220					
ttg	att	gga	ggg	gcg	gcc	gcg	ggg	acg	ctg	tct	gtt	ggc	ctg	acg	acg	720
Leu	Ile	Gly	Gly	Ala	Ala	Ala	Gly	Thr	Leu	Ser	Val	Gly	Leu	Thr	Thr	
	225				230					235					240	
cct	ctg	ctc	ctc	gga	ctt	gta	cac	tat	ttt	ttt	gtc	ttc	cac	gtt	ggg	768
Pro	Leu	Leu	Leu	Gly	Leu	Val	His	Tyr	Phe	Phe	Val	Phe	His	Val	Gly	
				245					250					255		
ctt	ttt	tgt	tgc	ctc	gga	ctc	gtg	ttt	cgg	tca	aac	gtt	tta	gcc	ctg	816
Leu	Phe	Cys	Cys	Leu	Gly	Leu	Val	Phe	Arg	Ser	Asn	Val	Leu	Ala	Leu	
			260					265					270			
gtt	tat	gtt	tta	gca	gcc	gct	gtg	ctg	ctg	acg	ctc	acg	cac	gtc	ttg	864
Val	Tyr	Val	Leu	Ala	Ala	Ala	Val	Leu	Leu	Thr	Leu	Thr	His	Val	Leu	

275	280	285	
ggg cca gga acg cat aat ttg ttc acc aga gtg tgt gtg ttt acg gtt			912
Gly Pro Gly Thr His Asn Leu Phe Thr Arg Val Cys Val Phe Thr Val			
290	295	300	
ttt tta ttg act atg ttt ggg gcg att gga tgc gaa tta caa ata atc			960
Phe Leu Leu Thr Met Phe Gly Ala Ile Gly Cys Glu Leu Gln Ile Ile			
305	310	315	320
aga aaa aaa cta cag cgt gcc gcg aac tcg cca aga ata gtc ttg ggg			1008
Arg Lys Lys Leu Gln Arg Ala Ala Asn Ser Pro Arg Ile Val Leu Gly			
325	330	335	
gtg tgt gcc tgc gga aac ctt ctg atg gcg gtg gtt ttt ttc tcc tta			1056
Val Cys Ala Cys Gly Asn Leu Leu Met Ala Val Val Phe Phe Ser Leu			
340	345	350	
aat aaa gtt gag ctt ggt gcc ctt taa			1083
Asn Lys Val Glu Leu Gly Ala Leu			
355	360		

&lt;210&gt; 131

&lt;211&gt; 360

&lt;212&gt; PRT

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 131

Met Gly Thr Tyr Thr Ser Glu Ala Ser Leu Ala Trp Leu Ser Phe Met			
1	5	10	15
Ser Gly Thr Val Ser Ala Ser Pro Phe Ile Leu Cys Phe Ile Tyr His			
20	25	30	
Ser Leu Tyr Phe Val Glu Pro Leu Ile Ser Val Glu Asn Ile Ile Phe			
35	40	45	
Ser Trp Gly Ala Val Gly Leu His Gly Leu Leu Leu Leu Phe Cys Ile			
50	55	60	
Phe Gly Leu Pro Ala Trp Leu Ser Arg Gln Val Asp Val Pro Cys Thr			
65	70	75	80
Ile Ser Ala Phe Leu Ile Thr Ala Gly Ser Met Ala Ser Thr Leu Gly			
85	90	95	
Val Asp Leu Pro Trp Val His Val Ser Ile Phe Val Gly Ser Cys Leu			
100	105	110	
Cys Leu Leu Leu Cys Val Val Ala Ala Asn Asp Val Val Tyr Leu Cys			
115	120	125	
Pro Thr Ile Ala His Arg Tyr Tyr Glu Leu Gly Phe Leu Ala Ala Phe			
130	135	140	
Ser Val Tyr Tyr Phe Leu Val Leu Lys Asn Leu Phe Leu Ala Pro Val			
145	150	155	160
Phe Leu Leu Pro Leu Val Ala Phe Ile Val Gly Gly Val Cys Ser Leu			
165	170	175	
Arg Ala Leu Arg Ser His Pro Leu Tyr Glu Ala Gly Leu Gln Arg Arg			
180	185	190	
His Ala Ile Phe Ser Leu Thr Ser Arg Arg Tyr Ile Thr Tyr Ser Ile			
195	200	205	
Lys Gln Ala Leu Glu Val Cys Gly Trp Asp Phe Tyr Leu Val Thr Val			
210	215	220	
Leu Ile Gly Gly Ala Ala Gly Thr Leu Ser Val Gly Leu Thr Thr			
225	230	235	240
Pro Leu Leu Leu Gly Leu Val His Tyr Phe Phe Val Phe His Val Gly			
245	250	255	



Leu	Phe	Cys	Cys	Leu	Gly	Leu	Val	Phe	Arg	Ser	Asn	Val	Leu	Ala	Leu
			260					265					270		
Val	Tyr	Val	Leu	Ala	Ala	Ala	Val	Leu	Leu	Thr	Leu	Thr	His	Val	Leu
			275				280					285			
Gly	Pro	Gly	Thr	His	Asn	Leu	Phe	Thr	Arg	Val	Cys	Val	Phe	Thr	Val
			290				295				300				
Phe	Leu	Leu	Thr	Met	Phe	Gly	Ala	Ile	Gly	Cys	Glu	Leu	Gln	Ile	Ile
305					310					315					320
Arg	Lys	Lys	Leu	Gln	Arg	Ala	Ala	Asn	Ser	Pro	Arg	Ile	Val	Leu	Gly
				325					330					335	
Val	Cys	Ala	Cys	Gly	Asn	Leu	Leu	Met	Ala	Val	Val	Phe	Phe	Ser	Leu
			340					345					350		
Asn	Lys	Val	Glu	Leu	Gly	Ala	Leu								
			355				360								

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<210> 132
<211> 1185
<212> DNA
<213> Macaca mulatta rhadinovirus 17577
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<220>  
<221> CDS  
<222> (1) .. (1185)
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<400> 132																	
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Met	Pro	Val	Ser	Phe	His	Tyr	Gly	Ala	Arg	Val	Asp	Val	Asp	Ala	Leu		
1		5			10					15							
ggc	agc	att	agc	agg	gtt	tac	gac	cac	att	aag	ggc	atc	gtt	aag	aaa	96	
Gly	Ser	Ile	Ser	Arg	Val	Tyr	Asp	His	Ile	Lys	Gly	Ile	Val	Lys	Lys		
20			25					30									
ggc	gtt	ata	cag	atc	agc	ggc	cag	ggc	agg	gcc	ccc	gtc	ctt	agc	gtg	144	
Gly	Val	Ile	Gln	Ile	Ser	Gly	Gln	Gly	Arg	Ala	Pro	Val	Leu	Ser	Val		
35			40					45									
ctc	tcc	agc	gtg	ggg	gac	gcg	ggc	gtt	ctc	ggg	ctc	agg	ctt	aaa	aat	192	
Leu	Ser	Ser	Val	Gly	Asp	Ala	Gly	Val	Leu	Gly	Leu	Arg	Leu	Lys	Asn		
50		55					60										
gca	ctg	gcg	ccg	ctg	atg	gta	tat	tct	gac	atg	acg	gac	gag	gtt	agc	240	
Ala	Leu	Ala	Pro	Leu	Met	Val	Tyr	Ser	Asp	Met	Thr	Asp	Glu	Val	Ser		
65		70					75					80					
ttt	agc	ttt	cga	aac	acc	tcc	ctt	ggg	aac	acg	ttc	aca	cac	acc	cgt	288	
Phe	Ser	Phe	Arg	Asn	Thr	Ser	Leu	Gly	Asn	Thr	Phe	Thr	His	Thr	Arg		
85				90					95								
gag	atg	ttt	gga	gtt	aac	att	gcg	gaa	atg	aac	gtg	gcg	ttc	tac	cac	336	
Glu	Met	Phe	Gly	Val	Asn	Ile	Ala	Glu	Met	Asn	Val	Ala	Phe	Tyr	His		
100			105					110									
cac	ggg	gac	gag	tcg	gac	gcg	gaa	gga	aag	ccg	cag	ttt	gtt	agg	acg	384	
His	Gly	Asp	Glu	Ser	Asp	Ala	Glu	Gly	Lys	Pro	Gln	Phe	Val	Arg	Thr		
115			120					125									
acc	atc	gcc	tac	ggg	gac	aat	cac	acg	agc	acc	gtg	cac	aag	agc	gtc	432	
Thr	Ile	Ala	Tyr	Gly	Asp	Asn	His	Thr	Ser	Thr	Val	His	Lys	Ser	Val		

130	135	140	
gtg gac gaa ccc aac cta ccc tcg ttc cac gac agg cta gag cag gcc			480
Val Asp Glu Pro Asn Leu Pro Ser Phe His Asp Arg Leu Glu Gln Ala			
145	150	155	160
ggg acg ggg aat cgc ctg ttc ctt acg gtt aag acg ctg act ttg ttg			528
Gly Thr Gly Asn Arg Leu Phe Leu Thr Val Lys Thr Leu Thr Leu Leu			
	165	170	175
tta aag tgg cta agg cag cag aaa acc agg gcc aag cag gtg gtc acc			576
Leu Lys Trp Leu Arg Gln Gln Lys Thr Arg Ala Lys Gln Val Val Thr			
	180	185	190
gtc tcg tta agc gaa acg ctg gca gtt gcc acg ttt acg gtc gac ggg			624
Val Ser Leu Ser Glu Thr Leu Ala Val Ala Thr Phe Thr Val Asp Gly			
	195	200	205
gtt agt aaa att att gat ttt aaa ccc gac acc ccg gac gcc aag tgg			672
Val Ser Lys Ile Ile Asp Phe Lys Pro Asp Thr Pro Asp Ala Lys Trp			
	210	215	220
act tgc gct aga gga aga aag ctg gac gtg ggt gtg gtt tct agc gac			720
Thr Cys Ala Arg Gly Arg Lys Leu Asp Val Gly Val Val Ser Ser Asp			
	225	230	235
ctg acg act cat gtg agt tta gag tct ctg gtg gcc gca ttg aac gca			768
Leu Thr Thr His Val Ser Leu Glu Ser Leu Val Ala Ala Leu Asn Ala			
	245	250	255
tgt aag att ccg gga ttt ttt ttg cct ggt ttc cgc tgg cac gcc aat			816
Cys Lys Ile Pro Gly Phe Phe Leu Pro Gly Phe Arg Trp His Ala Asn			
	260	265	270
gag att ctg gaa gtt gag ggc ctg ccg ctg aca gat agc ctt gct gac			864
Glu Ile Leu Glu Val Glu Gly Leu Pro Leu Thr Asp Ser Leu Ala Asp			
	275	280	285
gtc agg ttg ggc gtc atg cta tta aag gta gat ccg acg gac cgg aat			912
Val Arg Leu Gly Val Met Leu Leu Lys Val Asp Pro Thr Asp Arg Asn			
	290	295	300
aat gcc gtc ccg ggc aat ctc tcg gaa ggt gcc gat ccc gag ggg gtt			960
Asn Ala Val Pro Gly Asn Leu Ser Glu Gly Ala Asp Pro Glu Gly Val			
	305	310	315
cct gag ctc ccg tcc cct ccg aga acg cct gac ctg gac tta aaa gag			1008
Pro Glu Leu Pro Ser Pro Pro Arg Thr Pro Asp Leu Asp Leu Lys Glu			
	325	330	335
cag tgc gtc cca att gcc gag gac ggt gcc gag ccg aca gac ggg ggc			1056
Gln Cys Val Pro Ile Ala Glu Asp Gly Ala Glu Pro Thr Asp Gly Gly			
	340	345	350
gcc aaa tca ctg cgg acg agc ggc tct cga ccg gaa aaa aaa cac ggc			1104
Ala Lys Ser Leu Arg Thr Ser Gly Ser Arg Pro Glu Lys Lys His Gly			
	355	360	365
aag cga aaa cac agc agc tca ccc agt cgc ggg aaa gga aaa acc aag			1152
Lys Arg Lys His Ser Ser Ser Pro Ser Arg Gly Lys Gly Lys Thr Lys			
	370	375	380

acg cct cgc gcg acg ttc aac ccg ttg ttt taa  
 Thr Pro Arg Ala Thr Phe Asn Pro Leu Phe  
 385 390 395

1185

<210> 133  
 <211> 394  
 <212> PRT  
 <213> Macaca mulatta rhadinovirus 17577

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 1 5 10 15  
 Gly Ser Ile Ser Arg Val Tyr Asp His Ile Lys Gly Ile Val Lys Lys  
 20 25 30  
 Gly Val Ile Gln Ile Ser Gly Gln Gly Arg Ala Pro Val Leu Ser Val  
 35 40 45  
 Leu Ser Ser Val Gly Asp Ala Gly Val Leu Gly Leu Arg Leu Lys Asn  
 50 55 60  
 Ala Leu Ala Pro Leu Met Val Tyr Ser Asp Met Thr Asp Glu Val Ser  
 65 70 75 80  
 Phe Ser Phe Arg Asn Thr Ser Leu Gly Asn Thr Phe Thr His Thr Arg  
 85 90 95  
 Glu Met Phe Gly Val Asn Ile Ala Glu Met Asn Val Ala Phe Tyr His  
 100 105 110  
 His Gly Asp Glu Ser Asp Ala Glu Gly Lys Pro Gln Phe Val Arg Thr  
 115 120 125  
 Thr Ile Ala Tyr Gly Asp Asn His Thr Ser Thr Val His Lys Ser Val  
 130 135 140  
 Val Asp Glu Pro Asn Leu Pro Ser Phe His Asp Arg Leu Glu Gln Ala  
 145 150 155 160  
 Gly Thr Gly Asn Arg Leu Phe Leu Thr Val Lys Thr Leu Thr Leu Leu  
 165 170 175  
 Leu Lys Trp Leu Arg Gln Gln Lys Thr Arg Ala Lys Gln Val Val Thr  
 180 185 190  
 Val Ser Leu Ser Glu Thr Leu Ala Val Ala Thr Phe Thr Val Asp Gly  
 195 200 205  
 Val Ser Lys Ile Ile Asp Phe Lys Pro Asp Thr Pro Asp Ala Lys Trp  
 210 215 220  
 Thr Cys Ala Arg Gly Arg Lys Leu Asp Val Gly Val Val Ser Ser Asp  
 225 230 235 240  
 Leu Thr Thr His Val Ser Leu Glu Ser Leu Val Ala Ala Leu Asn Ala  
 245 250 255  
 Cys Lys Ile Pro Gly Phe Phe Leu Pro Gly Phe Arg Trp His Ala Asn  
 260 265 270  
 Glu Ile Leu Glu Val Glu Gly Leu Pro Leu Thr Asp Ser Leu Ala Asp  
 275 280 285  
 Val Arg Leu Gly Val Met Leu Leu Lys Val Asp Pro Thr Asp Arg Asn  
 290 295 300  
 Asn Ala Val Pro Gly Asn Leu Ser Glu Gly Ala Asp Pro Glu Gly Val  
 305 310 315 320  
 Pro Glu Leu Pro Ser Pro Pro Arg Thr Pro Asp Leu Asp Leu Lys Glu  
 325 330 335  
 Gln Cys Val Pro Ile Ala Glu Asp Gly Ala Glu Pro Thr Asp Gly Gly  
 340 345 350  
 Ala Lys Ser Leu Arg Thr Ser Gly Ser Arg Pro Glu Lys Lys His Gly  
 355 360 365  
 Lys Arg Lys His Ser Ser Ser Pro Ser Arg Gly Lys Gly Lys Thr Lys  
 370 375 380  
 Thr Pro Arg Ala Thr Phe Asn Pro Leu Phe

385

390

<210> 134  
 <211> 945  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(945)

<400> 134  
 atg ttt ggc ctg tca ata gta acc gcc gcc atg gag tcc cca gat cgg 48  
 Met Phe Gly Leu Ser Ile Val Thr Ala Ala Met Glu Ser Pro Asp Arg  
           1                  5                  10                  15

ttt ctg tac gcg agc gac cac cct ggc ttt tta gca ctc acc cag gag 96  
 Phe Leu Tyr Ala Ser Asp His Pro Gly Phe Leu Ala Leu Thr Gln Glu  
                   20                  25                  30

aca tgg cag aac aga tgg ttc ccc agt caa att tcc ctg cac gag gac 144  
 Thr Trp Gln Asn Arg Trp Phe Pro Ser Gln Ile Ser Leu His Glu Asp  
                   35                  40                  45

tcc gat gag gtg cga cta ttg agt ccc acc gat agg gag ttt tac cag 192  
 Ser Asp Glu Val Arg Leu Leu Ser Pro Thr Asp Arg Glu Phe Tyr Gln  
           50                  55                  60

ttt ctc ttc aca ttt ttg ggt atg gca gag agt ctg gta aac ttt aac 240  
 Phe Leu Phe Thr Phe Leu Gly Met Ala Glu Ser Leu Val Asn Phe Asn  
           65                  70                  75                  80

atc gaa gac cta gtt aaa gag ttc agc aat cac gac gtg acc cac tat 288  
 Ile Glu Asp Leu Val Lys Glu Phe Ser Asn His Asp Val Thr His Tyr  
                   85                  90                  95

tac gcc gaa cag gta gcc atg gaa aac atc cac ggc aaa gtg tat gcc 336  
 Tyr Ala Glu Gln Val Ala Met Glu Asn Ile His Gly Lys Val Tyr Ala  
                   100                  105                  110

aac ata ctg aac tta ttt ttt ggc ggt aat cgg ggg gac tta atg att 384  
 Asn Ile Leu Asn Leu Phe Phe Gly Gly Asn Arg Gly Asp Leu Met Ile  
                   115                  120                  125

tat gcc aaa aaa ata gtc gag gac gct acc ctg gcg aag aag att gac 432  
 Tyr Ala Lys Lys Ile Val Glu Asp Ala Thr Leu Ala Lys Lys Ile Asp  
           130                  135                  140

tgg ctg cat tcc cga gtg cgc aag gcc acc acg cgg gcc gag aag gtg 480  
 Trp Leu His Ser Arg Val Arg Lys Ala Thr Thr Arg Ala Glu Lys Val  
           145                  150                  155                  160

ctg ctg ttc ctg gtt atc gaa ggg ata tac ttt ata agt tca ttt tac 528  
 Leu Leu Phe Leu Val Ile Glu Gly Ile Tyr Phe Ile Ser Ser Phe Tyr  
                   165                  170                  175

tct ata gga ctt ttt cgc ctt cgc gga atc atg cgc ggg gtg tgc ctg 576  
 Ser Ile Gly Leu Phe Arg Leu Arg Gly Ile Met Arg Gly Val Cys Leu  
                   180                  185                  190

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gct aac gac tac atc tcc agg gac gag ctg cta cac acc agg gcc gcc 624
Ala Asn Asp Tyr Ile Ser Arg Asp Glu Leu Leu His Thr Arg Ala Ala
      195                200                205

agc ttg ctg tac aac acc atg atc tcc cga gac gaa tcc ccc tcc gtc 672
Ser Leu Leu Tyr Asn Thr Met Ile Ser Arg Asp Glu Ser Pro Ser Val
      210                215                220

gca tac atc cac ggc ctc ttt cgc gaa gcc gtg gag ata gag act ctg 720
Ala Tyr Ile His Gly Leu Phe Arg Glu Ala Val Glu Ile Glu Thr Leu
      225                230                235                240

ttt att cgt tcc aag agc cga gac gtg acc atg gtg aac gtc gga gac 768
Phe Ile Arg Ser Lys Ser Arg Asp Val Thr Met Val Asn Val Gly Asp
      245                250                255

atc gag cag ttt ttg cag gcc acg gcc gac agg att cta aag tca ata 816
Ile Glu Gln Phe Leu Gln Ala Thr Ala Asp Arg Ile Leu Lys Ser Ile
      260                265                270

aac ata ccg ccc ctg ttc ggt gcc cgc ccc cca aac gcg tgt ccc ttg 864
Asn Ile Pro Pro Leu Phe Gly Ala Arg Pro Pro Asn Ala Cys Pro Leu
      275                280                285

tcg tat acg agt gcc aag agt gtg aac ttt ttt gag cgt gat aat tct 912
Ser Tyr Thr Ser Ala Lys Ser Val Asn Phe Phe Glu Arg Asp Asn Ser
      290                295                300

gaa tat gtc aca tcc gtt cat aat gat ctg tag 945
Glu Tyr Val Thr Ser Val His Asn Asp Leu
      305                310                315

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<210> 135
<211> 314
<212> PRT
<213> Macaca mulatta rhadinovirus 17577

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<400> 135
Met Phe Gly Leu Ser Ile Val Thr Ala Ala Met Glu Ser Pro Asp Arg
  1           5           10           15
Phe Leu Tyr Ala Ser Asp His Pro Gly Phe Leu Ala Leu Thr Gln Glu
      20           25           30
Thr Trp Gln Asn Arg Trp Phe Pro Ser Gln Ile Ser Leu His Glu Asp
      35           40           45
Ser Asp Glu Val Arg Leu Leu Ser Pro Thr Asp Arg Glu Phe Tyr Gln
      50           55           60
Phe Leu Phe Thr Phe Leu Gly Met Ala Glu Ser Leu Val Asn Phe Asn
      65           70           75           80
Ile Glu Asp Leu Val Lys Glu Phe Ser Asn His Asp Val Thr His Tyr
      85           90           95
Tyr Ala Glu Gln Val Ala Met Glu Asn Ile His Gly Lys Val Tyr Ala
      100          105          110
Asn Ile Leu Asn Leu Phe Phe Gly Gly Asn Arg Gly Asp Leu Met Ile
      115          120          125
Tyr Ala Lys Lys Ile Val Glu Asp Ala Thr Leu Ala Lys Lys Ile Asp
      130          135          140
Trp Leu His Ser Arg Val Arg Lys Ala Thr Thr Arg Ala Glu Lys Val
      145          150          155          160
Leu Leu Phe Leu Val Ile Glu Gly Ile Tyr Phe Ile Ser Ser Phe Tyr

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                165                170                175
Ser Ile Gly Leu Phe Arg Leu Arg Gly Ile Met Arg Gly Val Cys Leu
                180                185                190
Ala Asn Asp Tyr Ile Ser Arg Asp Glu Leu Leu His Thr Arg Ala Ala
                195                200                205
Ser Leu Leu Tyr Asn Thr Met Ile Ser Arg Asp Glu Ser Pro Ser Val
                210                215                220
Ala Tyr Ile His Gly Leu Phe Arg Glu Ala Val Glu Ile Glu Thr Leu
225                230                235                240
Phe Ile Arg Ser Lys Ser Arg Asp Val Thr Met Val Asn Val Gly Asp
                245                250                255
Ile Glu Gln Phe Leu Gln Ala Thr Ala Asp Arg Ile Leu Lys Ser Ile
                260                265                270
Asn Ile Pro Pro Leu Phe Gly Ala Arg Pro Pro Asn Ala Cys Pro Leu
                275                280                285
Ser Tyr Thr Ser Ala Lys Ser Val Asn Phe Phe Glu Arg Asp Asn Ser
                290                295                300
Glu Tyr Val Thr Ser Val His Asn Asp Leu
305                310

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<210> 136
<211> 2367
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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<220>
<221> CDS
<222> (1)..(2367)

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<400> 136
atg aac acc gaa act tct ttc tct gcg gca aaa tct gcc aaa cct tta 48
Met Asn Thr Glu Thr Ser Phe Ser Ala Ala Lys Ser Ala Lys Pro Leu
  1                5                10                15

acc cta gtt acc gac gcg gga act ggg ggg tgt agc tca agc ctt gac 96
Thr Leu Val Thr Asp Ala Gly Thr Gly Gly Cys Ser Ser Ser Leu Asp
                20                25                30

cct gaa cga tgc gcc gaa tca ctc gtg aat tct tta aag gca aca ctt 144
Pro Glu Arg Cys Ala Glu Ser Leu Val Asn Ser Leu Lys Ala Thr Leu
                35                40                45

gga tgg gac ata gag gcc aac tca cta acc ggt ctc ctt tgg cac aga 192
Gly Trp Asp Ile Glu Ala Asn Ser Leu Thr Gly Leu Leu Trp His Arg
                50                55                60

ata atg gag gac agg tgc ctg gtt acg gtg cga gac tat ctc gcg gta 240
Ile Met Glu Asp Arg Cys Leu Val Thr Val Arg Asp Tyr Leu Ala Val
                65                70                75                80

ttc ggg gaa agg cta agc gac gag gtt cgc gcg ttt atg tca aaa cac 288
Phe Gly Glu Arg Leu Ser Asp Glu Val Arg Ala Phe Met Ser Lys His
                85                90                95

gaa gcg gcc ctt gac ggt ctt tta cag gac ttt aag cag agc aag gca 336
Glu Ala Ala Leu Asp Gly Leu Leu Gln Asp Phe Lys Gln Ser Lys Ala
                100                105                110

tac aca aat ttc gtt aac tgc ggc tac ctg tct gcc gtt agg ttt tac 384

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Tyr	Thr	Asn	Phe	Val	Asn	Cys	Gly	Tyr	Leu	Ser	Ala	Val	Arg	Phe	Tyr		
		115					120					125					
gat	acg	tac	gtg	ctg	aga	acc	cag	ggg	tct	tca	ccc	att	ttt	gaa	agc	432	
Asp	Thr	Tyr	Val	Leu	Arg	Thr	Gln	Gly	Ser	Ser	Pro	Ile	Phe	Glu	Ser		
		130					135				140						
gtg	gcc	cag	atg	ttt	atg	agg	gtg	gct	ggt	ttt	gtg	gcc	tgt	cag	tgt	480	
Val	Ala	Gln	Met	Phe	Met	Arg	Val	Ala	Val	Phe	Val	Ala	Cys	Gln	Cys		
		145					150				155				160		
ata	aaa	ttt	ccg	tgt	ttg	cgg	gag	acc	ctc	aga	cac	ctg	gtg	gag	agc	528	
Ile	Lys	Phe	Pro	Cys	Leu	Arg	Glu	Thr	Leu	Arg	His	Leu	Val	Glu	Ser		
				165					170					175			
gaa	acg	gag	ctg	gat	gag	atg	tac	ctg	ggt	ggg	tac	gcg	ttc	cat	tac	576	
Glu	Thr	Glu	Leu	Asp	Glu	Met	Tyr	Leu	Val	Gly	Tyr	Ala	Phe	His	Tyr		
			180					185					190				
atc	tcg	tca	cag	att	gtg	tgc	tgc	gca	acg	cct	gta	tta	agg	tca	gcc	624	
Ile	Ser	Ser	Gln	Ile	Val	Cys	Cys	Ala	Thr	Pro	Val	Leu	Arg	Ser	Ala		
			195				200						205				
ggg	ctt	cgc	gga	ggg	cag	ctt	tct	agc	tgt	ttt	att	tta	aag	ccg	tcc	672	
Gly	Leu	Arg	Gly	Gly	Gln	Leu	Ser	Ser	Cys	Phe	Ile	Leu	Lys	Pro	Ser		
		210				215					220						
atg	gcg	acc	gaa	gac	aaa	acc	ctc	aaa	gca	ctt	cat	gag	gaa	atg	tcc	720	
Met	Ala	Thr	Glu	Asp	Lys	Thr	Leu	Lys	Ala	Leu	His	Glu	Glu	Met	Ser		
					230					235					240		
ccc	ctt	ctc	gct	agc	aag	tca	ggc	gtg	ggg	ata	gat	gtc	tcg	tct	ttt	768	
Pro	Leu	Leu	Ala	Ser	Lys	Ser	Gly	Val	Gly	Ile	Asp	Val	Ser	Ser	Phe		
				245					250					255			
gcg	gaa	cac	aag	aac	atc	acc	agc	tgt	tta	aaa	tta	ata	aac	gcc	cac	816	
Ala	Glu	His	Lys	Asn	Ile	Thr	Ser	Cys	Leu	Lys	Leu	Ile	Asn	Ala	His		
			260					265					270				
gtt	ggg	tat	ttc	aac	gat	aac	aat	atc	cgt	cct	gtt	ggg	gcc	agc	gcc	864	
Val	Gly	Tyr	Phe	Asn	Asp	Asn	Asn	Ile	Arg	Pro	Val	Gly	Ala	Ser	Ala		
			275				280					285					
tac	atg	gaa	cta	tgg	cat	cat	cag	att	tgt	gat	ttt	ttg	aac	gcg	aag	912	
Tyr	Met	Glu	Leu	Trp	His	His	Gln	Ile	Cys	Asp	Phe	Leu	Asn	Ala	Lys		
			290				295				300						
atg	ccg	gag	aat	cag	gag	cgg	tgt	cac	aac	ctg	ttt	cag	ggc	gtg	tgt	960	
Met	Pro	Glu	Asn	Gln	Glu	Arg	Cys	His	Asn	Leu	Phe	Gln	Gly	Val	Cys		
					310					315					320		
gtg	ccg	gag	ctt	ttt	ttc	cga	ctg	tac	gaa	aca	aac	cca	gat	ggc	cag	1008	
Val	Pro	Glu	Leu	Phe	Phe	Arg	Leu	Tyr	Glu	Thr	Asn	Pro	Asp	Gly	Gln		
				325					330					335			
tgg	cac	ctg	ttt	gcg	cca	gag	gtg	gcg	cca	aat	ctc	cta	aaa	ctc	tac	1056	
Trp	His	Leu	Phe	Ala	Pro	Glu	Val	Ala	Pro	Asn	Leu	Leu	Lys	Leu	Tyr		
			340					345					350				
ggg	gcc	gaa	ttt	gag	att	gaa	tac	aac	aga	cta	gtg	gcc	gct	ggc	aaa	1104	
Gly	Ala	Glu	Phe	Glu	Ile	Glu	Tyr	Asn	Arg	Leu	Val	Ala	Ala	Gly	Lys		

355	360	365	
cac tct agc tcg ttg ccg tta aaa tcg atg atg tat gcc ctt att aac			1152
His Ser Ser Ser Leu Pro Leu Lys Ser Met Met Tyr Ala Leu Ile Asn			
370	375	380	
act gtc att aag acc ggc agt ccc tac gtc ctg cta aag gag gcg ctc			1200
Thr Val Ile Lys Thr Gly Ser Pro Tyr Val Leu Leu Lys Glu Ala Leu			
385	390	395	400
aac aaa cac cac tgg tgt gag acg caa ggc agc gcc ata aac tgt tct			1248
Asn Lys His His Trp Cys Glu Thr Gln Gly Ser Ala Ile Asn Cys Ser			
	405	410	415
aat ctc tgt gcg gaa atc gtg cag caa ccc gag ggt cag gct tcc gtg			1296
Asn Leu Cys Ala Glu Ile Val Gln Gln Pro Glu Gly Gln Ala Ser Val			
	420	425	430
tgt aac ttg gca aac att agc cta cca aag tgc ctc aga ccc cac agg			1344
Cys Asn Leu Ala Asn Ile Ser Leu Pro Lys Cys Leu Arg Pro His Arg			
	435	440	445
gga gag tct ggt gtg gag cct ggg aag ggg gat gta aca ttt ggt ttt			1392
Gly Glu Ser Gly Val Glu Pro Gly Lys Gly Asp Val Thr Phe Gly Phe			
450	455	460	
gaa ctg ctc gat gat gcc gtg gag gcc gca gtt atc att gtc aat gcg			1440
Glu Leu Leu Asp Asp Ala Val Glu Ala Ala Val Ile Ile Val Asn Ala			
465	470	475	480
tgc att ttg ggc ggg acg gcg cct acc gag agc gtt agg cgc ggc cag			1488
Cys Ile Leu Gly Gly Thr Ala Pro Thr Glu Ser Val Arg Arg Gly Gln			
	485	490	495
gag gaa cga tca atg ggc att ggc gtc caa gga ctg gcc gac gtg ttt			1536
Glu Glu Arg Ser Met Gly Ile Gly Val Gln Gly Leu Ala Asp Val Phe			
	500	505	510
gcc gaa ctg ggc ttt ggc tac ctt gac gcc gag agc gcc aag ctg gac			1584
Ala Glu Leu Gly Phe Gly Tyr Leu Asp Ala Glu Ser Ala Lys Leu Asp			
	515	520	525
gtg gag att ttt cag gca atg tat ttt acg gcg gtg caa acc agt cat			1632
Val Glu Ile Phe Gln Ala Met Tyr Phe Thr Ala Val Gln Thr Ser His			
530	535	540	
gag att gtt tta ctc ggc gag ggg act ccg ttt cgt gga tgg gag cgg			1680
Glu Ile Val Leu Leu Gly Glu Gly Thr Pro Phe Arg Gly Trp Glu Arg			
545	550	555	560
agt cga ttg gct cag ggt gtg ttt cac tgg caa acg tgg gac ggc gtt			1728
Ser Arg Leu Ala Gln Gly Val Phe His Trp Gln Thr Trp Asp Gly Val			
	565	570	575
aag ccg tcc cac cct ccc ttg gag aga tgg gag cag ctg ggg cgc agc			1776
Lys Pro Ser His Pro Pro Leu Glu Arg Trp Glu Gln Leu Gly Arg Ser			
	580	585	590
att gcc cag cat gga att ttc aac agc cag ttt ttg gcg ctg atg cca			1824
Ile Ala Gln His Gly Ile Phe Asn Ser Gln Phe Leu Ala Leu Met Pro			
595	600	605	



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acg gcc gga acc tct cag ctt acg ggg tac acc gaa gca ttt tat ccg 1872
Thr Ala Gly Thr Ser Gln Leu Thr Gly Tyr Thr Glu Ala Phe Tyr Pro
610 615 620

ttc ttt gcc aat atc gca tcg aag gtc acc agc aaa gaa gag atc ttg 1920
Phe Phe Ala Asn Ile Ala Ser Lys Val Thr Ser Lys Glu Glu Ile Leu
625 630 635 640

aag cca aac gtg act ttt ttt aag aga gtg aag cct ggt gac ctg cga 1968
Lys Pro Asn Val Thr Phe Phe Lys Arg Val Lys Pro Gly Asp Leu Arg
645 650 655

acg gtg cgc cgt tac gga ggt gac gtg gct tca ttt cca gaa ccc ctg 2016
Thr Val Arg Arg Tyr Gly Gly Asp Val Ala Ser Phe Pro Glu Pro Leu
660 665 670

aag gac aga tac aag att ttt ttg acg gcc ttt gat tac tgc cca att 2064
Lys Asp Arg Tyr Lys Ile Phe Leu Thr Ala Phe Asp Tyr Cys Pro Ile
675 680 685

aag cag ttg gag cgg gcc ggt gcg cgg gct cca ttt gta gac cag agt 2112
Lys Gln Leu Glu Arg Ala Gly Ala Arg Ala Pro Phe Val Asp Gln Ser
690 695 700

cag tcg ctt aat ttc ttt tta aag gag gag cag gcc acg cgg gcg agt 2160
Gln Ser Leu Asn Phe Phe Leu Lys Glu Glu Gln Ala Thr Arg Ala Ser
705 710 715 720

tat att cga gac ttg ctc ctg acc gga tac agg cta ggg tta aaa acc 2208
Tyr Ile Arg Asp Leu Leu Leu Thr Gly Tyr Arg Leu Gly Leu Lys Thr
725 730 735

atg ctg tat tat tgt cga att cag aaa cag aca aaa ctt aat gcc ctg 2256
Met Leu Tyr Tyr Cys Arg Ile Gln Lys Gln Thr Lys Leu Asn Ala Leu
740 745 750

cag tgc tta gat cag gtc gtg ggt gac aac atc tct tca gag ggg gcg 2304
Gln Cys Leu Asp Gln Val Val Gly Asp Asn Ile Ser Ser Glu Gly Ala
755 760 765

gag tct aac tgc gta caa aag gcc gac ggt gag cgg acc aag gta tgt 2352
Glu Ser Asn Cys Val Gln Lys Ala Asp Gly Glu Arg Thr Lys Val Cys
770 775 780

ttg gcc tgt caa tag 2367
Leu Ala Cys Gln
785

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&lt;210&gt; 137

&lt;211&gt; 788

&lt;212&gt; PRT

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 137

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Met Asn Thr Glu Thr Ser Phe Ser Ala Ala Lys Ser Ala Lys Pro Leu
1 5 10 15
Thr Leu Val Thr Asp Ala Gly Thr Gly Gly Cys Ser Ser Ser Leu Asp
20 25 30
Pro Glu Arg Cys Ala Glu Ser Leu Val Asn Ser Leu Lys Ala Thr Leu

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35					40					45					
Gly	Trp	Asp	Ile	Glu	Ala	Asn	Ser	Leu	Thr	Gly	Leu	Leu	Trp	His	Arg
50						55					60				
Ile	Met	Glu	Asp	Arg	Cys	Leu	Val	Thr	Val	Arg	Asp	Tyr	Leu	Ala	Val
65					70					75					80
Phe	Gly	Glu	Arg	Leu	Ser	Asp	Glu	Val	Arg	Ala	Phe	Met	Ser	Lys	His
				85					90					95	
Glu	Ala	Ala	Leu	Asp	Gly	Leu	Leu	Gln	Asp	Phe	Lys	Gln	Ser	Lys	Ala
			100					105					110		
Tyr	Thr	Asn	Phe	Val	Asn	Cys	Gly	Tyr	Leu	Ser	Ala	Val	Arg	Phe	Tyr
		115					120					125			
Asp	Thr	Tyr	Val	Leu	Arg	Thr	Gln	Gly	Ser	Ser	Pro	Ile	Phe	Glu	Ser
130					135					140					
Val	Ala	Gln	Met	Phe	Met	Arg	Val	Ala	Val	Phe	Val	Ala	Cys	Gln	Cys
145				150						155					160
Ile	Lys	Phe	Pro	Cys	Leu	Arg	Glu	Thr	Leu	Arg	His	Leu	Val	Glu	Ser
				165					170					175	
Glu	Thr	Glu	Leu	Asp	Glu	Met	Tyr	Leu	Val	Gly	Tyr	Ala	Phe	His	Tyr
			180					185					190		
Ile	Ser	Ser	Gln	Ile	Val	Cys	Cys	Ala	Thr	Pro	Val	Leu	Arg	Ser	Ala
		195					200				205				
Gly	Leu	Arg	Gly	Gly	Gln	Leu	Ser	Ser	Cys	Phe	Ile	Leu	Lys	Pro	Ser
210					215					220					
Met	Ala	Thr	Glu	Asp	Lys	Thr	Leu	Lys	Ala	Leu	His	Glu	Glu	Met	Ser
225				230						235					240
Pro	Leu	Leu	Ala	Ser	Lys	Ser	Gly	Val	Gly	Ile	Asp	Val	Ser	Ser	Phe
				245					250					255	
Ala	Glu	His	Lys	Asn	Ile	Thr	Ser	Cys	Leu	Lys	Leu	Ile	Asn	Ala	His
			260					265					270		
Val	Gly	Tyr	Phe	Asn	Asp	Asn	Asn	Ile	Arg	Pro	Val	Gly	Ala	Ser	Ala
		275					280					285			
Tyr	Met	Glu	Leu	Trp	His	His	Gln	Ile	Cys	Asp	Phe	Leu	Asn	Ala	Lys
290					295					300					
Met	Pro	Glu	Asn	Gln	Glu	Arg	Cys	His	Asn	Leu	Phe	Gln	Gly	Val	Cys
305				310						315					320
Val	Pro	Glu	Leu	Phe	Arg	Leu	Tyr	Glu	Thr	Asn	Pro	Asp	Gly	Gln	
			325					330					335		
Trp	His	Leu	Phe	Ala	Pro	Glu	Val	Ala	Pro	Asn	Leu	Leu	Lys	Leu	Tyr
			340					345					350		
Gly	Ala	Glu	Phe	Glu	Ile	Glu	Tyr	Asn	Arg	Leu	Val	Ala	Ala	Gly	Lys
			355				360					365			
His	Ser	Ser	Ser	Leu	Pro	Leu	Lys	Ser	Met	Met	Tyr	Ala	Leu	Ile	Asn
370					375					380					
Thr	Val	Ile	Lys	Thr	Gly	Ser	Pro	Tyr	Val	Leu	Leu	Lys	Glu	Ala	Leu
385				390						395					400
Asn	Lys	His	His	Trp	Cys	Glu	Thr	Gln	Gly	Ser	Ala	Ile	Asn	Cys	Ser
			405					410					415		
Asn	Leu	Cys	Ala	Glu	Ile	Val	Gln	Gln	Pro	Glu	Gly	Gln	Ala	Ser	Val
			420					425					430		
Cys	Asn	Leu	Ala	Asn	Ile	Ser	Leu	Pro	Lys	Cys	Leu	Arg	Pro	His	Arg
		435					440					445			
Gly	Glu	Ser	Gly	Val	Glu	Pro	Gly	Lys	Gly	Asp	Val	Thr	Phe	Gly	Phe
450				455						460					
Glu	Leu	Leu	Asp	Asp	Ala	Val	Glu	Ala	Ala	Val	Ile	Ile	Val	Asn	Ala
465				470						475					480
Cys	Ile	Leu	Gly	Gly	Thr	Ala	Pro	Thr	Glu	Ser	Val	Arg	Arg	Gly	Gln
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Glu	Glu	Arg	Ser	Met	Gly	Ile	Gly	Val	Gln	Gly	Leu	Ala	Asp	Val	Phe
			500				505					510			
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		515					520					525			

Val Glu Ile Phe Gln Ala Met Tyr Phe Thr Ala Val Gln Thr Ser His  
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 Glu Ile Val Leu Leu Gly Glu Gly Thr Pro Phe Arg Gly Trp Glu Arg  
 545 550 555 560  
 Ser Arg Leu Ala Gln Gly Val Phe His Trp Gln Thr Trp Asp Gly Val  
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 Lys Pro Ser His Pro Pro Leu Glu Arg Trp Glu Gln Leu Gly Arg Ser  
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 Thr Ala Gly Thr Ser Gln Leu Thr Gly Tyr Thr Glu Ala Phe Tyr Pro  
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 Lys Pro Asn Val Thr Phe Phe Lys Arg Val Lys Pro Gly Asp Leu Arg  
 645 650 655  
 Thr Val Arg Arg Tyr Gly Gly Asp Val Ala Ser Phe Pro Glu Pro Leu  
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 Lys Asp Arg Tyr Lys Ile Phe Leu Thr Ala Phe Asp Tyr Cys Pro Ile  
 675 680 685  
 Lys Gln Leu Glu Arg Ala Gly Ala Arg Ala Pro Phe Val Asp Gln Ser  
 690 695 700  
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 Met Leu Tyr Tyr Cys Arg Ile Gln Lys Gln Thr Lys Leu Asn Ala Leu  
 740 745 750  
 Gln Cys Leu Asp Gln Val Val Gly Asp Asn Ile Ser Ser Glu Gly Ala  
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 Arg Leu Leu Pro Pro Pro Pro His Arg Val Ser Leu Ser Arg Gly Arg  
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 gac ttt tct aag ggt gtt cgt gat ctg ctc tct aaa tat gtg gtg tcg 144  
 Asp Phe Ser Lys Gly Val Arg Asp Leu Leu Ser Lys Tyr Val Val Ser  
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 acc acc act ggg gtg gag gcc atc aaa gat gga ttt tta tct gtc tcg 192  
 Thr Thr Thr Gly Val Glu Ala Ile Lys Asp Gly Phe Leu Ser Val Ser

50	55	60	
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Pro Thr Cys Gln Thr Tyr Gly Asp Phe Leu Ile Tyr Ser Gln Thr Met			
65 70 75 80			
agt tca cag gaa cct cgg ggc acc tac ctg ttt tcc ttt aaa cag act	288		
Ser Ser Gln Glu Pro Arg Gly Thr Tyr Leu Phe Ser Phe Lys Gln Thr			
85 90 95			
gac act ggg tcc tcc att gac atg tta ttc acg cct acg tcg ctg gcg	336		
Asp Thr Gly Ser Ser Ile Asp Met Leu Phe Thr Pro Thr Ser Leu Ala			
100 105 110			
cga ctg tct agg atg gac gcg gac tct gcc ccc cag acc aac aga ata	384		
Arg Leu Ser Arg Met Asp Ala Asp Ser Ala Pro Gln Thr Asn Arg Ile			
115 120 125			
gcg tgt gtt tgg tac ggc cac gag agc ggt cta ctt gac gcc ata ccc	432		
Ala Cys Val Trp Tyr Gly His Glu Ser Gly Leu Leu Asp Ala Ile Pro			
130 135 140			
aat ttt gaa gaa ttg ttg gaa acc ggc tcg ctt cat cag ttt ctt gcg	480		
Asn Phe Glu Glu Leu Leu Glu Thr Gly Ser Leu His Gln Phe Leu Ala			
145 150 155 160			
ccg gtc ggg ccg ttg gtt caa acg gtc cac agt acg ttt gtc acc aag	528		
Pro Val Gly Pro Leu Val Gln Thr Val His Ser Thr Phe Val Thr Lys			
165 170 175			
gtg acg tct gcg tta aag ggc aac gta gtc gcc aga gag ccc gtt gtt	576		
Val Thr Ser Ala Leu Lys Gly Asn Val Val Ala Arg Glu Pro Val Val			
180 185 190			
aca cat att ggc ctt acg ctt cct agt gac atg ttt gtg gat tta gat	624		
Thr His Ile Gly Leu Thr Leu Pro Ser Asp Met Phe Val Asp Leu Asp			
195 200 205			
gac tca tgc ccg tcc agc ctg cgc gac gag cct ttg ccc gcc cac tcg	672		
Asp Ser Cys Pro Ser Ser Leu Arg Asp Glu Pro Leu Pro Ala His Ser			
210 215 220			
tct att tat gtt tgc tta acc tac att agg gta aat aat aga ccg gcg	720		
Ser Ile Tyr Val Cys Leu Thr Tyr Ile Arg Val Asn Asn Arg Pro Ala			
225 230 235 240			
cta gga ctt ggg ttt ttt aag tct ggt aaa gga tat tgt gaa ata gct	768		
Leu Gly Leu Gly Phe Phe Lys Ser Gly Lys Gly Tyr Cys Glu Ile Ala			
245 250 255			
gcc caa ttg agg gat ttt tac agc ggc gtg att cgc acc aaa tac att	816		
Ala Gln Leu Arg Asp Phe Tyr Ser Gly Val Ile Arg Thr Lys Tyr Ile			
260 265 270			
cag ctg cag aat gac ctg tat ata aat agg ctt gcg ttc ggc gta gtt	864		
Gln Leu Gln Asn Asp Leu Tyr Ile Asn Arg Leu Ala Phe Gly Val Val			
275 280 285			
tgc aga ctt gga agc gtg cct tcc ggt tta caa cca tct ttt caa agc	912		
Cys Arg Leu Gly Ser Val Pro Ser Gly Leu Gln Pro Ser Phe Gln Ser			
290 295 300			

ctt cac ttt aaa ggc gct gct tta ccg gtg tta aaa ttt acg gag ttt 960  
 Leu His Phe Lys Gly Ala Ala Leu Pro Val Leu Lys Phe Thr Glu Phe  
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gtt tcc aat ccg ggg tct tgg aag cta ttt ctt taa 996  
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<213> Macaca mulatta rhadinovirus 17577

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 35 40 45  
 Thr Thr Thr Gly Val Glu Ala Ile Lys Asp Gly Phe Leu Ser Val Ser  
 50 55 60  
 Pro Thr Cys Gln Thr Tyr Gly Asp Phe Leu Ile Tyr Ser Gln Thr Met  
 65 70 75 80  
 Ser Ser Gln Glu Pro Arg Gly Thr Tyr Leu Phe Ser Phe Lys Gln Thr  
 85 90 95  
 Asp Thr Gly Ser Ser Ile Asp Met Leu Phe Thr Pro Thr Ser Leu Ala  
 100 105 110  
 Arg Leu Ser Arg Met Asp Ala Asp Ser Ala Pro Gln Thr Asn Arg Ile  
 115 120 125  
 Ala Cys Val Trp Tyr Gly His Glu Ser Gly Leu Leu Asp Ala Ile Pro  
 130 135 140  
 Asn Phe Glu Glu Leu Leu Glu Thr Gly Ser Leu His Gln Phe Leu Ala  
 145 150 155 160  
 Pro Val Gly Pro Leu Val Gln Thr Val His Ser Thr Phe Val Thr Lys  
 165 170 175  
 Val Thr Ser Ala Leu Lys Gly Asn Val Val Ala Arg Glu Pro Val Val  
 180 185 190  
 Thr His Ile Gly Leu Thr Leu Pro Ser Asp Met Phe Val Asp Leu Asp  
 195 200 205  
 Asp Ser Cys Pro Ser Ser Leu Arg Asp Glu Pro Leu Pro Ala His Ser  
 210 215 220  
 Ser Ile Tyr Val Cys Leu Thr Tyr Ile Arg Val Asn Asn Arg Pro Ala  
 225 230 235 240  
 Leu Gly Leu Gly Phe Phe Lys Ser Gly Lys Gly Tyr Cys Glu Ile Ala  
 245 250 255  
 Ala Gln Leu Arg Asp Phe Tyr Ser Gly Val Ile Arg Thr Lys Tyr Ile  
 260 265 270  
 Gln Leu Gln Asn Asp Leu Tyr Ile Asn Arg Leu Ala Phe Gly Val Val  
 275 280 285  
 Cys Arg Leu Gly Ser Val Pro Ser Gly Leu Gln Pro Ser Phe Gln Ser  
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 Ser Leu Gln Gln Leu Lys Leu Leu Met Glu Phe Gln Leu Lys Pro Leu  
 35 40 45  
 cca acc gca cac ctt tta agc atg ccc acc gtg acc cgg ttt tta aat 192  
 Pro Thr Ala His Leu Leu Ser Met Pro Thr Val Thr Arg Phe Leu Asn  
 50 55 60  
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 Thr Ala Phe Lys Ile Asp Asn Pro Leu Val Ser Phe Ile Gln Lys His  
 65 70 75 80  
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 Pro Val Phe Phe Leu Met Arg Val Ala Arg Leu Pro Glu Pro Val Ile  
 85 90 95  
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 Thr Asp His Gln Ser Ala Glu Thr Ser Thr Gly Ile Leu Ser Glu Val  
 100 105 110  
 gtg aat gtt ctt aat aca gct att cga aaa cca cac gag tcc cca gcg 384  
 Val Asn Val Leu Asn Thr Ala Ile Arg Lys Pro His Glu Ser Pro Ala  
 115 120 125  
 gct aaa gac aac gat tat ctc gac aac cgt gcc ata ttg gcc atg att 432  
 Ala Lys Asp Asn Asp Tyr Leu Asp Asn Arg Ala Ile Leu Ala Met Ile  
 130 135 140  
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 Thr Glu Tyr Ile His His Val Thr Ser Arg Thr Pro Ser Gly Ile Pro  
 145 150 155 160  
 ccg aca cca cca atg ggt atc agc cat cta ccg tgc gta gag caa att 528  
 Pro Thr Pro Pro Met Gly Ile Ser His Leu Pro Cys Val Glu Gln Ile  
 165 170 175  
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 Leu His Glu Thr His Arg Gln Tyr Trp Asn Leu Thr Leu Pro Glu Ser  
 180 185 190  
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 Leu Phe Ile Asp Ile Gly Glu Val Ala Ser Pro Leu Gln Thr Trp Leu  
 195 200 205

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Ile Leu Ser Tyr Cys Lys Lys Leu Gln Leu Ala Pro Pro Pro Leu Phe	
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Pro Pro Val Asp Glu Leu Ala Arg Arg Leu Val Thr Gly His His Glu	
225 230 235 240	
ttg ttt gtc ccc cta tcg acg tca ctg gaa acg tac atc acc atg cca	768
Leu Phe Val Pro Leu Ser Thr Ser Leu Glu Thr Tyr Ile Thr Met Pro	
245 250 255	
gta tca aaa cag cga gcg ttt gag ata tac agc gtc ttt gcc aaa tca	816
Val Ser Lys Gln Arg Ala Phe Glu Ile Tyr Ser Val Phe Ala Lys Ser	
260 265 270	
aaa aac ata gtt gac ggc aca cca att tta gcg ttc acc gac aca gaa	864
Lys Asn Ile Val Asp Gly Thr Pro Ile Leu Ala Phe Thr Asp Thr Glu	
275 280 285	
ctt aca acg ttc acc ccc gaa ctg tta ttc ctg tac gac ttc gta atc	912
Leu Thr Thr Phe Thr Pro Glu Leu Leu Phe Leu Tyr Asp Phe Val Ile	
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305 310 315 320	
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Glu His Phe Ile Lys Lys Gly Ile Asp Phe Met Ala Glu Leu Gly Ala	
325 330 335	
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Phe Ile Glu Lys Thr Cys Gly Tyr Arg Ser Thr Val Ser Leu Ser Asn	
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Val Arg Ala Val Lys Ala Arg Leu Ala Ser Cys Gly Leu Ser Lys Glu	
355 360 365	
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Ala Cys Glu Asp Phe Arg Ala Met Ile Leu Met Thr Pro His Glu Thr	
370 375 380	
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Thr Pro Lys Trp Glu Asn Phe Thr Asp Phe Leu Glu Met Val Asn Gln	
385 390 395 400	
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Leu Thr Leu Tyr Gly Phe Tyr Phe Tyr Glu Cys Leu Asn Gln Tyr Ser	
405 410 415	
ccc act agc ata tcg ctg gcc aaa att caa aat atc tta aac cga gtc	1296
Pro Thr Ser Ile Ser Leu Ala Lys Ile Gln Asn Ile Leu Asn Arg Val	
420 425 430	
gat gcc gaa cag agc gat cgc gcc ctg tgg cgc act cca tta atc ggg	1344
Asp Ala Glu Gln Ser Asp Arg Ala Leu Trp Arg Thr Pro Leu Ile Gly	
435 440 445	

tct ttc ccg ttc ccc tgg aaa ttg aac aac gtg ctg gcg ttt ttt aag	1392
Ser Phe Pro Phe Pro Trp Lys Leu Asn Asn Val Leu Ala Phe Phe Lys	
450 455 460	
cct agc acc ccc gtg gca acg cta caa aaa atc tac aag gca ata ccg	1440
Pro Ser Thr Pro Val Ala Thr Leu Gln Lys Ile Tyr Lys Ala Ile Pro	
465 470 475 480	
tcg tac cta atg agg tct ttg ttc gaa ata gcg gcc aac aaa tcg tgg	1488
Ser Tyr Leu Met Arg Ser Leu Phe Glu Ile Ala Ala Asn Lys Ser Trp	
485 490 495	
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Gly Asn Ile Ala Leu Ala Glu Ser Ala Pro Leu Thr Asp Ile Gln Thr	
500 505 510	
gcc gaa cca gac cag ggt ccc gtg tcc gcc cag gtt atc gca aaa tat	1584
Ala Glu Pro Asp Gln Gly Pro Val Ser Ala Gln Val Ile Ala Lys Tyr	
515 520 525	
tgc agc cgt ctc caa ata agc gcg aca gat tat gac gca gcc atc gtc	1632
Cys Ser Arg Leu Gln Ile Ser Ala Thr Asp Tyr Asp Ala Ala Ile Val	
530 535 540	
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Ser Ser Pro Gly Phe Ala Ala Glu Phe Ile Lys Thr Lys Leu Tyr Pro	
545 550 555 560	
atc ctt agc gag gtg ctc cga aac acg tcc aaa aaa aat cga tcg cta	1728
Ile Leu Ser Glu Val Leu Arg Asn Thr Ser Lys Lys Asn Arg Ser Leu	
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Phe Gln Ile Arg Trp Leu Ile Val Phe Ala Ala Glu Asp Ala Arg Asp	
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Leu Ala Pro Ile Arg Arg Ser Leu Ala Leu Ala Tyr Phe Gln Ile Met	
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610 615 620	
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Asp Tyr Leu Gln Glu Thr Phe Arg Cys Ile Arg Gln Val Ile Pro Glu	
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Ala Thr Cys Pro Gln Glu Phe Leu Gln Tyr Leu Phe Thr Phe Gln Asn	
645 650 655	
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660 665 670	
gac ctg aaa aac ggc atc ccc ggt ata ctg gac ctt gtc tcc tta ggt	2064
Asp Leu Lys Asn Gly Ile Pro Gly Ile Leu Asp Leu Val Ser Leu Gly	
675 680 685	
gcc gcg ttt tat aac atg aaa cta ctg tac gat tca acg cta gac acc	2112



Ala	Ala	Phe	Tyr	Asn	Met	Lys	Leu	Leu	Tyr	Asp	Ser	Thr	Leu	Asp	Thr	
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Val	Glu	Ile	Pro	Thr	Glu	Glu	Gly	Gln	Pro	Ile	Val	Val	Ser	Met	Phe	
705					710					715					720	
gta	ttc	aaa	tcc	acg	att	cgc	gtc	ctc	gag	aag	ctc	tta	cag	gaa	gcc	2208
Val	Phe	Lys	Ser	Thr	Ile	Arg	Val	Leu	Glu	Lys	Leu	Leu	Gln	Glu	Ala	
				725					730						735	
gtt	atc	gcg	tta	act	caa	acg	tcc	gaa	ccg	atg	tac	gca	gcg	cac	atc	2256
Val	Ile	Ala	Leu	Thr	Gln	Thr	Ser	Glu	Pro	Met	Tyr	Ala	Ala	His	Ile	
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cgt	ctg	atg	caa	cac	ctc	acg	tac	atg	caa	aag	atc	gcc	gga	cac	gaa	2304
Arg	Leu	Met	Gln	His	Leu	Thr	Tyr	Met	Gln	Lys	Ile	Ala	Gly	His	Glu	
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Ile	Met	Thr	Thr	Gln	Leu	Pro	Ser	Val	Phe	His	Glu	Ile	His	Glu	Gly	
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Tyr	Leu	Gln	Cys	Phe	Lys	Arg	Phe	Lys	Arg	Leu	Met	Leu	His	Val	Thr	
785					790					795					800	
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Gly	Ser	Cys	Cys	Tyr	Ser	Leu	Thr	Arg	Tyr	Phe	Gly	Phe	Leu	Tyr	Gln	
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ccc	ccc	cta	ata	ccc	gat	acc	atc	gta	caa	aaa	att	tta	aac	ttt	aac	2496
Pro	Pro	Leu	Ile	Pro	Asp	Thr	Ile	Val	Gln	Lys	Ile	Leu	Asn	Phe	Asn	
			820					825							830	
gac	aaa	acg	gac	aca	acc	gac	gac	atc	tta	aag	agc	ctg	tca	cag	ccc	2544
Asp	Lys	Thr	Asp	Thr	Thr	Asp	Asp	Ile	Leu	Lys	Ser	Leu	Ser	Gln	Pro	
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Val	Arg	Gln	Gly	Pro	Leu	Ser	Ala	Glu	Asn	Glu	Ser	Ser	Ser	Arg	Leu	
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tca	aaa	aac	aac	gtt	gag	ctg	ctt	caa	aaa	ctg	tac	gac	gac	ttt	cgg	2640
Ser	Lys	Asn	Asn	Val	Glu	Leu	Leu	Gln	Lys	Leu	Tyr	Asp	Asp	Phe	Arg	
865					870					875					880	
acc	gcc	tcc	aca	aac	aat	aac	ccc	acc	tct	att	aaa	ctt	gaa	tat	tcg	2688
Thr	Ala	Ser	Thr	Asn	Asn	Asn	Pro	Thr	Ser	Ile	Lys	Leu	Glu	Tyr	Ser	
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ggt	aat	tat	aac	gaa	aca	caa	gtg	tcc	gta	gat	tgg	agc	aca	tat	aac	2736
Gly	Asn	Tyr	Asn	Glu	Thr	Gln	Val	Ser	Val	Asp	Trp	Ser	Thr	Tyr	Asn	
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ctg	gtg	aca	tac	acc	gca	ccc	gac	gat	acg	tta	aaa	ttc	acc	ccg	gtt	2784
Leu	Val	Thr	Tyr	Thr	Ala	Pro	Asp	Asp	Thr	Leu	Lys	Phe	Thr	Pro	Val	
		915					920					925				
aac	acg	gag	gca	cta	gat	cgc	atg	ttt	gca	gaa	taa					2820
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930

935

940

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Thr Ala Phe Lys Ile Asp Asn Pro Leu Val Ser Phe Ile Gln Lys His
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Thr Asp His Gln Ser Ala Glu Thr Ser Thr Gly Ile Leu Ser Glu Val
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Val Asn Val Leu Asn Thr Ala Ile Arg Lys Pro His Glu Ser Pro Ala
          115          120          125
Ala Lys Asp Asn Asp Tyr Leu Asp Asn Arg Ala Ile Leu Ala Met Ile
          130          135          140
Thr Glu Tyr Ile His His Val Thr Ser Arg Thr Pro Ser Gly Ile Pro
  145          150          155          160
Pro Thr Pro Pro Met Gly Ile Ser His Leu Pro Cys Val Glu Gln Ile
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Leu His Glu Thr His Arg Gln Tyr Trp Asn Leu Thr Leu Pro Glu Ser
          180          185          190
Leu Phe Ile Asp Ile Gly Glu Val Ala Ser Pro Leu Gln Thr Trp Leu
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Ile Leu Ser Tyr Cys Lys Lys Leu Gln Leu Ala Pro Pro Pro Leu Phe
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Pro Pro Val Asp Glu Leu Ala Arg Arg Leu Val Thr Gly His His Glu
  225          230          235          240
Leu Phe Val Pro Leu Ser Thr Ser Leu Glu Thr Tyr Ile Thr Met Pro
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Val Ser Lys Gln Arg Ala Phe Glu Ile Tyr Ser Val Phe Ala Lys Ser
          260          265          270
Lys Asn Ile Val Asp Gly Thr Pro Ile Leu Ala Phe Thr Asp Thr Glu
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Leu Thr Thr Phe Thr Pro Glu Leu Leu Phe Leu Tyr Asp Phe Val Ile
          290          295          300
Glu Ser Leu Cys Lys Asn Gln Ala Tyr Gly Cys Ser Arg Asn Ala Ile
  305          310          315          320
Glu His Phe Ile Lys Lys Gly Ile Asp Phe Met Ala Glu Leu Gly Ala
          325          330          335
Phe Ile Glu Lys Thr Cys Gly Tyr Arg Ser Thr Val Ser Leu Ser Asn
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Val Arg Ala Val Lys Ala Arg Leu Ala Ser Cys Gly Leu Ser Lys Glu
          355          360          365
Ala Cys Glu Asp Phe Arg Ala Met Ile Leu Met Thr Pro His Glu Thr
          370          375          380
Thr Pro Lys Trp Glu Asn Phe Thr Asp Phe Leu Glu Met Val Asn Gln
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Leu Thr Leu Tyr Gly Phe Tyr Phe Tyr Glu Cys Leu Asn Gln Tyr Ser
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Pro Thr Ser Ile Ser Leu Ala Lys Ile Gln Asn Ile Leu Asn Arg Val
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Pro Glu Gly Phe Ser Asp Ile Gly Thr Lys Leu Ser Glu Leu Gln Ala	
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tac att aag tac aaa aaa cag ttt ctg gag cat ttt gaa aca acc cag	4752
Tyr Ile Lys Tyr Lys Lys Gln Phe Leu Glu His Phe Glu Thr Thr Gln	
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cct aac gtc ttt caa cgc ttc ccg cta tcc caa aac ata acc gaa aac	4800
Pro Asn Val Phe Gln Arg Phe Pro Leu Ser Gln Asn Ile Thr Glu Asn	
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Val Pro Ala Arg Pro Ala Met Asp Ser Val Ala Arg Leu Thr Asn His	
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Leu His Val Arg Gly Ser Ala Pro His Phe Thr Thr Trp Ile Glu Thr	
1620 1625 1630	
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Leu Pro Thr Val Asp Pro Glu Lys Pro Thr His Val Pro Ala His Gly	
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Gly Ala Pro Leu His Arg Gln Ile Thr Tyr Ser Asn Val Leu Glu Ala	
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Leu Phe Ser Leu Cys Ser Thr Thr Leu Thr Pro Val Pro Thr Ala Pro	
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Gly Leu Glu Ile Ala Thr Arg Ala Arg Arg Gly Ala Glu Ala Ala Thr	
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Trp Met Asp Arg Gln Trp Pro Asp Ile Ala Gln Thr Leu Gln Asp Val	
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Leu Asp Thr Tyr Glu His Thr Thr Ala His Ala Asn Arg Asp Ala Ala	
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Phe Asn Thr Phe Leu Ala Met Cys Val Phe Thr Gln Ile Ile Arg Gly	
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gct agc aga gcc gtg acg ctc ccg aag tta ccg agc acc gcc gtc gat	5280
Ala Ser Arg Ala Val Thr Leu Pro Lys Leu Pro Ser Thr Ala Val Asp	
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Phe Pro Glu Glu Ile Val Leu Thr Pro Arg Glu Cys Thr Thr Leu Val	
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Thr Ala Met Trp Pro Thr Leu Ala Ala Ala Ile Leu Arg Leu Lys Ser	
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Tyr Ser Glu Ala Leu Gly Leu Met Ser Arg Phe Leu Pro Leu Met Phe	
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Gln Ala Leu Pro His Leu Thr Leu Glu Ala Gln Val Lys Asn Gly Pro	
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His Asn Thr Pro Pro Gln Leu Arg Cys Phe Ala Lys Thr Glu Ala Ile	
1825 1830 1835 1840	
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Pro Tyr Phe Pro Ala Gln Trp Gln Ser Ala Asn Leu Glu Gln Ser Leu	
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Trp Gly Gln Thr Asp Phe Leu Gln Ile Cys Asp Asn Asn Gln Arg Lys	
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gcc agg gtg gcg gcc gtc acc tgg gcg ctc acg acg ata gac ggc gtg	5664
Ala Arg Val Ala Ala Val Thr Trp Ala Leu Thr Thr Ile Asp Gly Val	

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Val Leu Asp Gln Leu Trp Ser Thr Phe Lys Pro Met Thr Ala Ala Ser			
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Asp Asp Thr Tyr Val Asp Leu Val Glu Thr Leu His Leu Thr Thr Phe			
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Gly Pro Arg Gly Pro Thr Pro Arg Arg Glu Thr Thr Thr Glu His Pro			
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Pro Tyr Glu Tyr Gly Gln Pro Thr Gly Tyr Cys Ile Ser Gly Gln Ser			
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acg acg ccg gtc cag gct tca aac aca ccg gta tcc gct ttc gag gcg			5904
Thr Thr Pro Val Gln Ala Ser Asn Thr Pro Val Ser Ala Phe Glu Ala			
	1955	1960	1965
gtg ctc gga gca atg gtg ttt cac gta ccg atc aga ata ttt ttg gcg			5952
Val Leu Gly Ala Met Val Phe His Val Pro Ile Arg Ile Phe Leu Ala			
	1970	1975	1980
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Ala Thr Pro Lys Arg Leu Gly Gln Ala Arg Gly Gly Met Gly Leu Leu			
1985	1990	1995	2000
aca ccc atc ctg gaa tgc gtc ccc gac gtc gag ccc ttc aaa agc ctg			6048
Thr Pro Ile Leu Glu Cys Val Pro Asp Val Glu Pro Phe Lys Ser Leu			
	2005	2010	2015
tat aac gca ccc cgc aaa ccc gtg ccc att gaa acg cta ccc gca tcc			6096
Tyr Asn Ala Pro Arg Lys Pro Val Pro Ile Glu Thr Leu Pro Ala Ser			
	2020	2025	2030
ctc cac ccg cac gac gag cga cag gtc ttt ctg aga cag gca cag tgg			6144
Leu His Pro His Asp Glu Arg Gln Val Phe Leu Arg Gln Ala Gln Trp			
	2035	2040	2045
cta tcc tac cga ttc aca cca cac gaa gcc gcc ccg tcg tcg act ccg			6192
Leu Ser Tyr Arg Phe Thr Pro His Glu Ala Ala Arg Ser Ser Thr Pro			
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ccg ctt ctg gtg gtc ata gac cct gaa aac ctc gta acg gca acg tac			6240
Pro Leu Leu Val Val Ile Asp Pro Glu Asn Leu Val Thr Ala Thr Tyr			
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tcc agt ggc ggg cct gca aat ttc gag agc agg ccg ttt tac gtg atg			6288
Ser Ser Gly Gly Pro Ala Asn Phe Glu Ser Arg Pro Phe Tyr Val Met			
	2085	2090	2095
ccc gga cca tac ccc cca gac tgg cca aaa acg ctg tcg gta aca tca			6336
Pro Gly Pro Tyr Pro Pro Asp Trp Pro Lys Thr Leu Ser Val Thr Ser			
	2100	2105	2110
aac acg tcc gtg acg cac ctc agc cac gac gag ata tgt aac ctc ttt			6384
Asn Thr Ser Val Thr His Leu Ser His Asp Glu Ile Cys Asn Leu Phe			
	2115	2120	2125

act acg cta tcc cga gaa cac ggg acc gtg caa ggc agg gat atc ttc	6432
Thr Thr Leu Ser Arg Glu His Gly Thr Val Gln Gly Arg Asp Ile Phe	
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Ala Ala Ala Pro Thr Asn Val Thr Pro Glu Gln Thr Ala Asn Pro Pro	
2145 2150 2155 2160	
gca tgg gaa acg gat aac cga tta ata acg caa aca gaa acc gcc aaa	6528
Ala Trp Glu Thr Asp Asn Arg Leu Ile Thr Gln Thr Glu Thr Ala Lys	
2165 2170 2175	
aaa cct cat ata att cct gcg tct cct aaa gcg cgg aca gat cca ccg	6576
Lys Pro His Ile Ile Pro Ala Ser Pro Lys Ala Arg Thr Asp Pro Pro	
2180 2185 2190	
gtg gaa acc acg acc cac cat tca caa ggg caa gcg tcg caa cac gca	6624
Val Glu Thr Thr Thr His His Ser Gln Gly Gln Ala Ser Gln His Ala	
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Asn Ser Asn Val Asn Gln Pro Gly Gln Ile Thr Ser His Ala Ser Arg	
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Asn Thr Pro Ser Thr Ala Pro Gln Ala Ser Ser Ser Pro Glu Lys Phe	
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His Ile Asn Gln Pro Ala Ser Gly Gln Val Thr Glu Pro Lys Gly Ile	
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Phe Gly Thr Tyr Lys Pro Arg Val Leu Thr Glu Pro Ala Lys Pro Ala	
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Lys Leu Pro Ile Asn Pro Pro Thr Ala Arg Val Phe Ile Gly Thr Ala	
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Ser Lys Leu Ser Pro Ala Val Glu Glu Ser His Gly Ala Thr Pro Asp	
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Ala His Gln Ser Lys Ile Asp Arg Glu Lys Tyr Ala Glu Ser Arg Pro	
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Arg Arg Thr Pro His Leu Glu Glu Gly Pro Arg Glu Pro His Val Asn	
2355 2360 2365	

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 Thr Val His Gly Arg Glu Asn Pro Gly Leu Gln Thr Ala Thr Pro Ser  
 2385 2390 2395 2400

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 Arg Thr Asp Gly Arg Leu Leu His Asp Glu Ser Glu Val Glu Ser Thr  
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cca acc gag gag gta aaa cga tcg cca aaa aca caa gat gtg tct cac 7344  
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 Ser Leu Thr Val Pro Thr Pro Arg Val Thr Pro Ile Pro Pro Thr Asn  
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<212> PRT

<213> Macaca mulatta rhadinovirus 17577

<400> 143

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 Cys Leu Ser Asn Cys Val Ile Tyr Leu Ala Gln Ser Tyr Phe Asn Arg  
 35 40 45

Glu Ser Pro Val Thr Asp Thr Asn Asp Leu Asp Asp Val Leu Arg Gln  
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 Gly Ala Thr Leu Asp Phe Ile Leu Arg Arg Ser Gly Thr Leu Gly Tyr  
       65                          70                          75                          80  
 Asn Gln Tyr Ala Gln Leu His His Ile Pro Ser Phe Ile Lys Thr Asn  
                           85                          90                          95  
 Glu Trp Thr Ala Ala Ile Phe Gln Ser Gln Glu Tyr Phe Gly Leu Ile  
                           100                          105                          110  
 Gly Leu Asp Ala Ala Ile Arg Glu Pro Phe Ile Glu Ser Leu Lys Ser  
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 Ile Leu Thr Arg Asn Tyr Ala Gly Thr Val Gln Tyr Phe Leu Phe Ile  
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 Cys Gly Asp Lys Ala Gly Ala Val Ile Ile Lys Asn Lys Thr Phe Tyr  
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 Leu Phe Asp Pro His Cys Val Pro His Val Pro Asn Ser Pro Ala His  
                           165                          170                          175  
 Val Ile Ser Ser Ser Asp Pro Thr Ala Ile Leu Glu Tyr Val Ser Pro  
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 Pro Asp Arg Glu Tyr Thr Gly Ser Phe Leu Tyr Ile Met Pro Ser Glu  
                           195                          200                          205  
 Tyr Val Asn Pro Glu His Tyr Ile Thr Asn His Tyr Arg Thr Ile Thr  
                           210                          215                          220  
 Phe Ala Lys Val His Gly Pro His Ile Asp Ile Ser Thr Gly Ile Glu  
       225                          230                          235                          240  
 Pro Cys Thr Ile Glu Asp Ile Pro Ser Pro Arg Ser Pro Asp Val  
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 Ala Glu Pro Pro Thr Ser Tyr Pro Asp Pro Ala Thr Asn Asp Ala Asp  
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 Thr Lys Leu Leu Thr Pro Ala Pro Ala Gln Thr Ala Val Asp His Pro  
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 Glu Phe Gln Thr Thr Pro Gly Ala Thr Leu Leu Leu Ser Glu Leu Ser  
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 Val His Asp Asp Ala Ile Ser Ala Glu Val Ile Trp Met Asp Asp Asp  
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 Thr Pro Phe Ser Ala Phe Asp Asp Leu Ile Thr Asp His Asp Phe Ser  
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 Gln His Leu Pro Asn Ile Ser Asp Lys Gln Asn Gly Arg Ala Val Arg  
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 Leu Glu His Gly Leu Ile Thr Asp Ala Gln Ala Arg Gly Pro Ser Ala  
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Arg Ala Thr His Ala Asp	Ala Gln Lys Lys Leu	Ala Ser Ala Phe Asn
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Ala Leu Lys Glu Gln Ile Ala	Asn His Leu Ser Pro	Gly Phe Leu Ala
610	615	620
Val Tyr Ser Ala Asp Glu	Val Lys His Leu Arg	Asp Lys Ile Gln Asp
625	630	635
Leu Lys Thr Gly Ile Glu	Gln Arg Asn Lys Glu	Ile Gln Gln Glu Glu
645	650	655
Leu Phe Phe Asp Ala Met	Leu Thr Ala Leu Asp	Thr Phe Gln Pro Pro
660	665	670
Pro Lys Thr Ala Phe Pro	Met Glu Ile Phe Pro	His Arg Lys Thr Glu
675	680	685
Val Met Leu Asp His Leu	Ala Ser Ile Thr Thr	Arg Leu Thr Glu Asp
690	695	700
Ala Thr Glu Ala Leu Asn	Asn Tyr Leu Glu Thr	Pro Pro Asp Gln Gly
705	710	715
Thr His Ile Thr Asn Ile	Pro Asn Phe Ser Ser	Ile Val Ala Asn Ile
725	730	735
Ile Ser Thr Leu Lys Ile	Leu Thr Tyr Ala Glu	Asn Asp Met Gln Leu
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Gly Glu Leu Ala Thr Ile	Phe Asn Leu Glu Trp	Pro Tyr Glu Thr Val
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Pro Pro Val Gln Glu Leu	Pro Leu Val Ala Arg	Ala Lys Ala Lys Met
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Glu Ser Val Thr Lys Met	Glu Lys Asn Gln Ala	Leu Asp Gln Ile
805	810	815
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Asp Glu Asn Pro Val Arg	Ala Met Ser Ile Pro	Ile Leu Glu Thr Tyr
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Glu Lys Leu Lys Ala Ala	Ile His Asp Leu Ala	Ser Ser Glu Ser Phe
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Pro Asp His Glu Thr Leu	Thr Arg Ile Val Ser	Gly Val Ala Ser Ala
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Gly His Leu Asn Glu Leu	Lys Leu Val Thr Thr	Gln Ser Arg Val Asp
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                          1685                    1690                    1695  
 Trp Met Asp Arg Gln Trp Pro Asp Ile Ala Gln Thr Leu Gln Asp Val  
                          1700                    1705                    1710  
 Leu Asp Thr Tyr Glu His Thr Thr Ala His Ala Asn Arg Asp Ala Ala  
                          1715                    1720                    1725  
 Phe Asn Thr Phe Leu Ala Met Cys Val Phe Thr Gln Ile Ile Arg Gly  
                          1730                    1735                    1740  
 Ala Ser Arg Ala Val Thr Leu Pro Lys Leu Pro Ser Thr Ala Val Asp  
 1745                    1750                    1755                    1760  
 Phe Pro Glu Glu Ile Val Leu Thr Pro Arg Glu Cys Thr Thr Leu Val  
                          1765                    1770                    1775  
 Thr Ala Met Trp Pro Thr Leu Ala Ala Ile Leu Arg Leu Lys Ser  
                          1780                    1785                    1790  
 Tyr Ser Glu Ala Leu Gly Leu Met Ser Arg Phe Leu Pro Leu Met Phe  
                          1795                    1800                    1805  
 Gln Ala Leu Pro His Leu Thr Leu Glu Ala Gln Val Lys Asn Gly Pro  
                          1810                    1815                    1820  
 His Asn Thr Pro Pro Gln Leu Arg Cys Phe Ala Lys Thr Glu Ala Ile  
 1825                    1830                    1835                    1840  
 Pro Tyr Phe Pro Ala Gln Trp Gln Ser Ala Asn Leu Glu Gln Ser Leu  
                          1845                    1850                    1855  
 Trp Gly Gln Thr Asp Phe Leu Gln Ile Cys Asp Asn Asn Gln Arg Lys  
                          1860                    1865                    1870  
 Ala Arg Val Ala Ala Val Thr Trp Ala Leu Thr Thr Ile Asp Gly Val  
                          1875                    1880                    1885  
 Val Leu Asp Gln Leu Trp Ser Thr Phe Lys Pro Met Thr Ala Ala Ser  
                          1890                    1895                    1900  
 Asp Asp Thr Tyr Val Asp Leu Val Glu Thr Leu His Leu Thr Thr Phe  
 1905                    1910                    1915                    1920  
 Gly Pro Arg Gly Pro Thr Pro Arg Arg Glu Thr Thr Thr Glu His Pro  
                          1925                    1930                    1935  
 Pro Tyr Glu Tyr Gly Gln Pro Thr Gly Tyr Cys Ile Ser Gly Gln Ser  
                          1940                    1945                    1950  
 Thr Thr Pro Val Gln Ala Ser Asn Thr Pro Val Ser Ala Phe Glu Ala  
                          1955                    1960                    1965  
 Val Leu Gly Ala Met Val Phe His Val Pro Ile Arg Ile Phe Leu Ala  
                          1970                    1975                    1980  
 Ala Thr Pro Lys Arg Leu Gly Gln Ala Arg Gly Gly Met Gly Leu Leu  
 1985                    1990                    1995                    2000

Thr Pro Ile Leu Glu Cys Val Pro Asp Val Glu Pro Phe Lys Ser Leu  
 2005 2010 2015  
 Tyr Asn Ala Pro Arg Lys Pro Val Pro Ile Glu Thr Leu Pro Ala Ser  
 2020 2025 2030  
 Leu His Pro His Asp Glu Arg Gln Val Phe Leu Arg Gln Ala Gln Trp  
 2035 2040 2045  
 Leu Ser Tyr Arg Phe Thr Pro His Glu Ala Ala Arg Ser Ser Thr Pro  
 2050 2055 2060  
 Pro Leu Leu Val Val Ile Asp Pro Glu Asn Leu Val Thr Ala Thr Tyr  
 2065 2070 2075 2080  
 Ser Ser Gly Gly Pro Ala Asn Phe Glu Ser Arg Pro Phe Tyr Val Met  
 2085 2090 2095  
 Pro Gly Pro Tyr Pro Pro Asp Trp Pro Lys Thr Leu Ser Val Thr Ser  
 2100 2105 2110  
 Asn Thr Ser Val Thr His Leu Ser His Asp Glu Ile Cys Asn Leu Phe  
 2115 2120 2125  
 Thr Thr Leu Ser Arg Glu His Gly Thr Val Gln Gly Arg Asp Ile Phe  
 2130 2135 2140  
 Ala Ala Ala Pro Thr Asn Val Thr Pro Glu Gln Thr Ala Asn Pro Pro  
 2145 2150 2155 2160  
 Ala Trp Glu Thr Asp Asn Arg Leu Ile Thr Gln Thr Glu Thr Ala Lys  
 2165 2170 2175  
 Lys Pro His Ile Ile Pro Ala Ser Pro Lys Ala Arg Thr Asp Pro Pro  
 2180 2185 2190  
 Val Glu Thr Thr Thr His His Ser Gln Gly Gln Ala Ser Gln His Ala  
 2195 2200 2205  
 Asn Ser Asn Val Asn Gln Pro Gly Gln Ile Thr Ser His Ala Ser Arg  
 2210 2215 2220  
 Asn Thr Pro Ser Thr Ala Pro Gln Ala Ser Ser Ser Pro Glu Lys Phe  
 2225 2230 2235 2240  
 Asn Thr Gln Thr Val Pro Arg Leu Ile Ser Gln Thr Ser Glu Thr Ala  
 2245 2250 2255  
 His Ile Asn Gln Pro Ala Ser Gly Gln Val Thr Glu Pro Lys Gly Ile  
 2260 2265 2270  
 Phe Gly Thr Tyr Lys Pro Arg Val Leu Thr Glu Pro Ala Lys Pro Ala  
 2275 2280 2285  
 Asn Ala Gly Val Ala Ser Arg Gln Pro Glu Ala Thr Thr Thr Val Pro  
 2290 2295 2300  
 Lys Leu Pro Ile Asn Pro Pro Thr Ala Arg Val Phe Ile Gly Thr Ala  
 2305 2310 2315 2320  
 Ser Lys Leu Ser Pro Ala Val Glu Glu Ser His Gly Ala Thr Pro Asp  
 2325 2330 2335  
 Ala His Gln Ser Lys Ile Asp Arg Glu Lys Tyr Ala Glu Ser Arg Pro  
 2340 2345 2350  
 Arg Arg Thr Pro His Leu Glu Glu Gly Pro Arg Glu Pro His Val Asn  
 2355 2360 2365  
 Thr Pro Thr Ser Ala His Ile Asn Val Pro Ser Ser Gln Gly Gln Lys  
 2370 2375 2380  
 Thr Val His Gly Arg Glu Asn Pro Gly Leu Gln Thr Ala Thr Pro Ser  
 2385 2390 2395 2400  
 Ala Pro Gln Pro Thr Ala Ser Asn Pro Arg Ile Gln Tyr Thr Leu Pro  
 2405 2410 2415  
 Arg Thr Asp Gly Arg Leu Leu His Asp Glu Ser Glu Val Glu Ser Thr  
 2420 2425 2430  
 Pro Thr Glu Glu Val Lys Arg Ser Pro Lys Thr Gln Asp Val Ser His  
 2435 2440 2445  
 Gly Pro Glu Pro Asp Asp Ser Arg Trp Thr Ala Pro Leu Gly Pro Thr  
 2450 2455 2460  
 Ile Glu Ile His Arg Leu Glu His Pro Gln Ile Leu Lys Asn Ile Thr  
 2465 2470 2475 2480  
 Ser Leu Thr Val Pro Thr Pro Arg Val Thr Pro Ile Pro Pro Thr Asn



cgc tcg tct caa aat aaa aaa agc aag tga  
 Arg Ser Ser Gln Asn Lys Lys Ser Lys  
 165 170

510

<210> 145  
 <211> 169  
 <212> PRT  
 <213> Macaca mulatta rhadinovirus 17577

<400> 145  
 Met Ser Ser Leu Arg Val Lys Glu Pro Ile Val Gln Gly Arg Leu Glu  
 1 5 10 15  
 His Asp Tyr Pro Asn His Pro Leu Val Ala Glu Met Asn Asn Leu Pro  
 20 25 30  
 Gln Gly Asp Met Ser Pro Ala Gln Tyr Ala Ile Ala Lys Arg Asn Tyr  
 35 40 45  
 Leu Val Phe Leu Thr Ala Lys His His Tyr Asp Met Tyr Met Gln Lys  
 50 55 60  
 Lys Asn Gly Ile Leu Arg Lys Asp His Leu Arg Gly Leu Arg Gly Lys  
 65 70 75 80  
 Lys Asp Ala Ser Ser Ser Ile Ser Gly Val Leu Ser Gly Ser Gly Ser  
 85 90 95  
 Ala Ala Pro Ser Val Ala Pro Val Ala Ser Thr Leu Gly Ser Asn Ser  
 100 105 110  
 Phe Thr Thr Ile Ser Ser Gly Pro His Ser Leu Ile Gly Ser Met Gly  
 115 120 125  
 Pro Ala Pro Gly Gly Gly Gly Pro Gly Ser Val Ala Ser Ser Gly Ile  
 130 135 140  
 Gly Ser Thr Ser Leu Ser Pro Ser Asp Ala Thr Thr Leu Asp Thr Arg  
 145 150 155 160  
 Arg Ser Ser Gln Asn Lys Lys Ser Lys  
 165

<210> 146  
 <211> 1347  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(1347)

<400> 146  
 atg gcc tcg ggc cgc ttg cct aac ctg gct gaa gac gaa gct gcc tgt 48  
 Met Ala Ser Gly Arg Leu Pro Asn Leu Ala Glu Asp Glu Ala Ala Cys  
 1 5 10 15  
 cat ggg cgc ggt tct tat cct gcc cat cgt tgg ctg gat ggt tct cgg 96  
 His Gly Arg Gly Ser Tyr Pro Ala His Arg Trp Leu Asp Gly Ser Arg  
 20 25 30  
 ctg ggc tta gat ctc gcg gcc tct ata cgc tca atc gga cta tgc ccc 144  
 Leu Gly Leu Asp Leu Ala Ala Ser Ile Arg Ser Ile Gly Leu Cys Pro  
 35 40 45  
 gaa tgc tac gtg tgt ttt gtg acg tac ggg ctc ggt gcc tgg gac gga 192  
 Glu Cys Tyr Val Cys Phe Val Thr Tyr Gly Leu Gly Ala Trp Asp Gly

50	55	60	
cga ccc cca aaa tgg gct tgc acg tta att tct gcc cca tcc ttt cag	240		
Arg Pro Pro Lys Trp Ala Cys Thr Leu Ile Ser Ala Pro Ser Phe Gln			
65 70 75 80			
acc gcc ctg aac gag att gct acc ggc tgg agg ccg gat aac cca cct	288		
Thr Ala Leu Asn Glu Ile Ala Thr Gly Trp Arg Pro Asp Asn Pro Pro			
85 90 95			
aaa aac ggc gac gtg aga tcg cgg ctg cac gat atc ggc cgg tcg ttg	336		
Lys Asn Gly Asp Val Arg Ser Arg Leu His Asp Ile Gly Arg Ser Leu			
100 105 110			
tta gag gcg tac gcg tgg gtg ctg agg tgt atc tgc acc ggc gtg ggc	384		
Leu Glu Ala Tyr Ala Trp Val Leu Arg Cys Ile Cys Thr Gly Val Gly			
115 120 125			
tgt ccc agc gac gaa ggt tta agt tta acg gcc gtt ccc agg agc gcg	432		
Cys Pro Ser Asp Glu Gly Leu Ser Leu Thr Ala Val Pro Arg Ser Ala			
130 135 140			
tgg tcc agg tat ctt gtt gtg tcg ttt cag agg gcg tgt tgt ctc gtg	480		
Trp Ser Arg Tyr Leu Val Val Ser Phe Gln Arg Ala Cys Cys Leu Val			
145 150 155 160			
tgc aaa acc ctt aac tgt cgc cag cgg ttt ccc ctg gtt acc tgt ttg	528		
Cys Lys Thr Leu Asn Cys Arg Gln Arg Phe Pro Leu Val Thr Cys Leu			
165 170 175			
cca cag cac gcg ttg gat ctg ccc gtt ttg ccg aag aaa tgg aac ggg	576		
Pro Gln His Ala Leu Asp Leu Pro Val Leu Arg Lys Lys Trp Asn Gly			
180 185 190			
ggc ggt tgt gtc tcg atg cag ttg aac gtt ccg tcc att tcc aga cgt	624		
Gly Gly Cys Val Ser Met Gln Leu Asn Val Pro Ser Ile Ser Arg Arg			
195 200 205			
ctg gga gct aac ctg aat gag agt gtc ccg ggc cct tcg gac gcg gga	672		
Leu Gly Ala Asn Leu Asn Glu Ser Val Pro Gly Pro Ser Asp Ala Gly			
210 215 220			
ctt ctg gcc tcg ctg cga gaa ctg gcg ccg acc gtc ccg tgc ggc aac	720		
Leu Leu Ala Ser Leu Arg Glu Leu Ala Pro Thr Val Pro Cys Gly Asn			
225 230 235 240			
ccg ttt aac gcc ctt ctg agg agc ctg acg ttt agg gcc ctg ctg agc	768		
Pro Phe Asn Ala Leu Leu Arg Ser Leu Thr Phe Arg Ala Leu Leu Ser			
245 250 255			
atg tcc cgt gtt gtg ttg ccc ata ggg gag tcg acc gag acg gag ata	816		
Met Ser Arg Val Val Leu Pro Ile Gly Glu Ser Thr Glu Thr Glu Ile			
260 265 270			
tcc cgc gac ctg ggt caa aaa gta ttg gcg tat aac gta ctg ttt ccg	864		
Ser Arg Asp Leu Gly Gln Lys Val Leu Ala Tyr Asn Val Leu Phe Pro			
275 280 285			
tgt atc tct cta cct gtt tgg tcc cag gtg gtg gcc agg agc gta ctg	912		
Cys Ile Ser Leu Pro Val Trp Ser Gln Val Val Ala Arg Ser Val Leu			
290 295 300			

gag aag acc gtg cca gct ccg agg gtg gtg gtg tgc ctc gag tgc ggt 960  
 Glu Lys Thr Val Pro Ala Pro Arg Val Val Val Cys Leu Glu Cys Gly  
 305 310 315 320  
 tac tgt ttg aat ttc gga cgg ggt aaa ttt gaa acc gta aat ttc cca 1008  
 Tyr Cys Leu Asn Phe Gly Arg Gly Lys Phe Glu Thr Val Asn Phe Pro  
 325 330 335  
 ccc acc aac gtg ttt ttc agt cgc gac caa aaa gag aag cag ctt tcg 1056  
 Pro Thr Asn Val Phe Phe Ser Arg Asp Gln Lys Glu Lys Gln Leu Ser  
 340 345 350  
 atc tgt gct acc acc ggg cgc gta tat tgc tct tat tgt ggc gga tcg 1104  
 Ile Cys Ala Thr Thr Gly Arg Val Tyr Cys Ser Tyr Cys Gly Gly Ser  
 355 360 365  
 cac atg cgg gtt ata tct cta ttc gag atc acg tgt gtt gga gat ccc 1152  
 His Met Arg Val Ile Ser Leu Phe Glu Ile Thr Cys Val Gly Asp Pro  
 370 375 380  
 tat tta cgg tgc gtg ctc gcc aac aac gcg gca cat gcc ata cga gac 1200  
 Tyr Leu Arg Cys Val Leu Ala Asn Asn Ala Ala His Ala Ile Arg Asp  
 385 390 395 400  
 gcg aac tcc ctg gtt agc gtc gtc gtg ccc tgt ttg gcg tcg ccg gac 1248  
 Ala Asn Ser Leu Val Ser Val Val Val Pro Cys Leu Ala Ser Pro Asp  
 405 410 415  
 tgc gcg acc ggc cta tta aag cat ttg cgt gtg gcc gag ctg ttt tat 1296  
 Cys Ala Thr Gly Leu Leu Lys His Leu Arg Val Ala Glu Leu Phe Tyr  
 420 425 430  
 ttg acc tcg tct ata tcg tcc ctg tcc tgt gga aag tgt aat aga agt 1344  
 Leu Thr Ser Ser Ile Ser Ser Leu Ser Cys Gly Lys Cys Asn Arg Ser  
 435 440 445  
 taa 1347

&lt;210&gt; 147

&lt;211&gt; 448

&lt;212&gt; PRT

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 147

Met Ala Ser Gly Arg Leu Pro Asn Leu Ala Glu Asp Glu Ala Ala Cys  
 1 5 10 15  
 His Gly Arg Gly Ser Tyr Pro Ala His Arg Trp Leu Asp Gly Ser Arg  
 20 25 30  
 Leu Gly Leu Asp Leu Ala Ala Ser Ile Arg Ser Ile Gly Leu Cys Pro  
 35 40 45  
 Glu Cys Tyr Val Cys Phe Val Thr Tyr Gly Leu Gly Ala Trp Asp Gly  
 50 55 60  
 Arg Pro Pro Lys Trp Ala Cys Thr Leu Ile Ser Ala Pro Ser Phe Gln  
 65 70 75 80  
 Thr Ala Leu Asn Glu Ile Ala Thr Gly Trp Arg Pro Asp Asn Pro Pro  
 85 90 95  
 Lys Asn Gly Asp Val Arg Ser Arg Leu His Asp Ile Gly Arg Ser Leu  
 100 105 110

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Leu Glu Ala Tyr Ala Trp Val Leu Arg Cys Ile Cys Thr Gly Val Gly
      115              120              125
Cys Pro Ser Asp Glu Gly Leu Ser Leu Thr Ala Val Pro Arg Ser Ala
      130              135              140
Trp Ser Arg Tyr Leu Val Val Ser Phe Gln Arg Ala Cys Cys Leu Val
      145              150              155              160
Cys Lys Thr Leu Asn Cys Arg Gln Arg Phe Pro Leu Val Thr Cys Leu
      165              170              175
Pro Gln His Ala Leu Asp Leu Pro Val Leu Arg Lys Lys Trp Asn Gly
      180              185              190
Gly Gly Cys Val Ser Met Gln Leu Asn Val Pro Ser Ile Ser Arg Arg
      195              200              205
Leu Gly Ala Asn Leu Asn Glu Ser Val Pro Gly Pro Ser Asp Ala Gly
      210              215              220
Leu Leu Ala Ser Leu Arg Glu Leu Ala Pro Thr Val Pro Cys Gly Asn
      225              230              235              240
Pro Phe Asn Ala Leu Leu Arg Ser Leu Thr Phe Arg Ala Leu Leu Ser
      245              250              255
Met Ser Arg Val Val Leu Pro Ile Gly Glu Ser Thr Glu Thr Glu Ile
      260              265              270
Ser Arg Asp Leu Gly Gln Lys Val Leu Ala Tyr Asn Val Leu Phe Pro
      275              280              285
Cys Ile Ser Leu Pro Val Trp Ser Gln Val Val Ala Arg Ser Val Leu
      290              295              300
Glu Lys Thr Val Pro Ala Pro Arg Val Val Val Cys Leu Glu Cys Gly
      305              310              315              320
Tyr Cys Leu Asn Phe Gly Arg Gly Lys Phe Glu Thr Val Asn Phe Pro
      325              330              335
Pro Thr Asn Val Phe Phe Ser Arg Asp Gln Lys Glu Lys Gln Leu Ser
      340              345              350
Ile Cys Ala Thr Thr Gly Arg Val Tyr Cys Ser Tyr Cys Gly Gly Ser
      355              360              365
His Met Arg Val Ile Ser Leu Phe Glu Ile Thr Cys Val Gly Asp Pro
      370              375              380
Tyr Leu Arg Cys Val Leu Ala Asn Asn Ala Ala His Ala Ile Arg Asp
      385              390              395              400
Ala Asn Ser Leu Val Ser Val Val Val Pro Cys Leu Ala Ser Pro Asp
      405              410              415
Cys Ala Thr Gly Leu Leu Lys His Leu Arg Val Ala Glu Leu Phe Tyr
      420              425              430
Leu Thr Ser Ser Ile Ser Ser Leu Ser Cys Gly Lys Cys Asn Arg Ser
      435              440              445

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<210> 148  
 <211> 675  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(675)

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<400> 148
atg agt tcc gga aaa cgt tta gtt gac gag ctg tgc gat tta gtt gtc 48
Met Ser Ser Gly Lys Arg Leu Val Asp Glu Leu Cys Asp Leu Val Val
  1              5              10              15

tct tac ctg gga ccc tct gga atc tcc ctg gac ttg gag agg tgt cag 96
Ser Tyr Leu Gly Pro Ser Gly Ile Ser Leu Asp Leu Glu Arg Cys Gln

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<210> 149
<211> 224
<212> PRT
<213> Macaca mulatta rhadinovirus 17577
<400> 149
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Met Ser Ser Gly Lys Arg Leu Val Asp Glu Leu Cys Asp Leu Val Val
 1           5           10           15
Ser Tyr Leu Gly Pro Ser Gly Ile Ser Leu Asp Leu Glu Arg Cys Gln
          20           25           30
Asp Gly Ala Pro Val Tyr Ala Lys Gly Gly Ala Val Pro Val Cys Thr
          35           40           45
Val Arg Leu Gln His Gly Cys Val Tyr His Leu Glu Phe Val Tyr Lys
 50           55           60
Phe Trp Leu His Lys Leu Glu Arg Leu Ala Tyr Pro Phe Ala Pro Cys
 65           70           75           80
Phe Val Ile Ile Asn Asn Gly Leu Ala Thr Thr Leu Lys Cys Phe Leu
          85           90           95
Cys Lys Pro Arg Asp Ala Asp Ala Gln Phe Gly Lys Asn Leu Pro Ile
          100          105          110
Asn Ser Asp Val Tyr Leu Glu Arg Asn Ser Ser Val Ser Leu Gly Gln
          115          120          125
Asp Asp Phe Met Lys Phe Lys Ala Arg Leu Val Phe Ser Gly Asp Leu
 130          135          140
Asn Val Tyr Ser Ser Met Val Ile Cys Arg Thr Tyr Phe Thr Glu His
 145          150          155          160
Arg Gln Val Leu Gln Phe Leu Val Val Thr Pro Lys Ser Ala Lys Arg
          165          170          175
Leu Lys Thr Leu Leu Arg Thr Val Phe Ala Leu Thr Gly His Ser Asp
          180          185          190
Gly Leu Gly Ala Leu Arg Arg Thr Gly Ser Val Ala Arg Pro Ser Gly
          195          200          205
Ser Glu Leu Lys Asp Ile Gly Arg Gly Glu Arg Ala Ala Met Thr Asn
 210          215          220

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<210> 150  
 <211> 1374  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(1374)

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<400> 150
atg ttc gtc ccg tgg caa ctg gag acc ctc atg aga cac tgg ccc tct 48
Met Phe Val Pro Trp Gln Leu Glu Thr Leu Met Arg His Trp Pro Ser
 1           5           10           15

ctg cgg gga ctc gta gaa caa tcc ttc ctc ccc ggt acc ccg gac gga 96
Leu Arg Gly Leu Val Glu Gln Ser Phe Leu Pro Gly Thr Pro Asp Gly
          20           25           30

gct ttt aac agc ccg gta tta atc cac act cag gac tct cta caa ccc 144
Ala Phe Asn Ser Pro Val Leu Ile His Thr Gln Asp Ser Leu Gln Pro
          35           40           45

gcc tca tcg tgc agg gtg tgt agc ctc ctg ttc act ctg gtc cgg aca 192
Ala Ser Ser Cys Arg Val Cys Ser Leu Leu Phe Thr Leu Val Arg Thr
          50           55           60

ttc cca ccc ccc gac tct ttc ttc gaa gac tac ggc tgg ttg tgc ctc 240
Phe Pro Pro Pro Asp Ser Phe Phe Glu Asp Tyr Gly Trp Leu Cys Leu
 65           70           75           80

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acc tgc cta tac gcc ccc cga tca tgg acg gct acc ctc atg gtg gct	288
Thr Cys Leu Tyr Ala Pro Arg Ser Trp Thr Ala Thr Leu Met Val Ala	
85 90 95	
gcc gac ctt ttg gaa cta acg cac gtg tac ttc ccg caa tgc gtg aaa	336
Ala Asp Leu Leu Glu Leu Thr His Val Tyr Phe Pro Gln Cys Val Lys	
100 105 110	
gat ggg cca gta tac acc gcc caa agc atc ctc gga atc gac gtc cag	384
Asp Gly Pro Val Tyr Thr Ala Gln Ser Ile Leu Gly Ile Asp Val Gln	
115 120 125	
ctg cac ttc ttc gca acc cgc tgc ttc cga ccc atc gac aga gaa caa	432
Leu His Phe Phe Ala Thr Arg Cys Phe Arg Pro Ile Asp Arg Glu Gln	
130 135 140	
ata ctc cac aca tct cat tta aat ttt tta caa acc gag ttt att agg	480
Ile Leu His Thr Ser His Leu Asn Phe Leu Gln Thr Glu Phe Ile Arg	
145 150 155 160	
ggc atg tta gaa ggc acg att ccg gga tcg ttc tgt ttt aaa acg tcc	528
Gly Met Leu Glu Gly Thr Ile Pro Gly Ser Phe Cys Phe Lys Thr Ser	
165 170 175	
tgg ccg cgc aca gaa aag gac gac caa caa cct acc gtt gcg tgt tgt	576
Trp Pro Arg Thr Glu Lys Asp Asp Gln Gln Pro Thr Val Ala Cys Cys	
180 185 190	
tcc gtt ggc cgc gga agt cac acc aac cgg gat aac cgc cta ccc gag	624
Ser Val Gly Arg Gly Ser His Thr Asn Arg Asp Asn Arg Leu Pro Glu	
195 200 205	
gac ctg gaa gag gcg ttc aac tcc acg aac gcc gag gaa aag ccc agc	672
Asp Leu Glu Glu Ala Phe Asn Ser Thr Asn Ala Glu Glu Lys Pro Ser	
210 215 220	
ctc ctc ggc gtc ttt tcg gca acg tgg gca gaa tcc cag ctt ctt ggc	720
Leu Leu Gly Val Phe Ser Ala Thr Trp Ala Glu Ser Gln Leu Leu Gly	
225 230 235 240	
tcc gac aca caa cag gca gat acc cat tta caa ccc tcc gcc ttc cca	768
Ser Asp Thr Gln Gln Ala Asp Thr His Leu Gln Pro Ser Ala Phe Pro	
245 250 255	
acc cca gaa gat gct gac caa tca cag ggc ccc tgc ctg atg cac cca	816
Thr Pro Glu Asp Ala Asp Gln Ser Gln Gly Pro Cys Leu Met His Pro	
260 265 270	
acg ctc aac cta aaa aca aaa aac cac acc gca tcc ata tgc gtt cta	864
Thr Leu Asn Leu Lys Thr Lys Asn His Thr Ala Ser Ile Cys Val Leu	
275 280 285	
tgc gag tgt ctg gcc gca cac ccg gac gcc ggt ccg gtt ctg aaa gat	912
Cys Glu Cys Leu Ala Ala His Pro Asp Ala Gly Pro Val Leu Lys Asp	
290 295 300	
ctg cgt cgc gac att ctg gaa aac atg gaa aac aac gtt aag ctc gtc	960
Leu Arg Arg Asp Ile Leu Glu Asn Met Glu Asn Asn Val Lys Leu Val	
305 310 315 320	
aat cgc ata tcg tac atc cta aac gat ccg gac tca ctg tca cac gtg	1008

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Asn Arg Ile Ser Tyr Ile Leu Asn Asp Pro Asp Ser Leu Ser His Val
      325                      330                      335

cgc gac gaa cat ctg cgc ggc cta att aaa cgg tgc tcg gca caa gaa 1056
Arg Asp Glu His Leu Arg Gly Leu Ile Lys Arg Cys Ser Ala Gln Glu
      340                      345                      350

atc cac aag cat ttt ttt tgc gac ccg gtg tgc gtc ctg aac acg tac 1104
Ile His Lys His Phe Phe Cys Asp Pro Val Cys Val Leu Asn Thr Tyr
      355                      360                      365

tcg cac tgt ccc gcg gtt tta ttt aaa tgc cca cct ccc gaa aag tat 1152
Ser His Cys Pro Ala Val Leu Phe Lys Cys Pro Pro Pro Glu Lys Tyr
      370                      375                      380

aag aag ctc aaa gct cgt ctg gca acc gga gag ttc cta gac tgc aac 1200
Lys Lys Leu Lys Ala Arg Leu Ala Thr Gly Glu Phe Leu Asp Cys Asn
      385                      390                      395                      400

aga ata ttt gac tgc gag acc tta cag acc ctg gcc gtc ctc ttt aag 1248
Arg Ile Phe Asp Cys Glu Thr Leu Gln Thr Leu Ala Val Leu Phe Lys
      405                      410                      415

ggg tct caa ctg gcc aaa atc ggc aaa acc acg tcg ctc gag ata atc 1296
Gly Ser Gln Leu Ala Lys Ile Gly Lys Thr Thr Ser Leu Glu Ile Ile
      420                      425                      430

cgt gaa ctc gga ttt caa ctg cgt cga cac aac att caa atc acc cac 1344
Arg Glu Leu Gly Phe Gln Leu Arg Arg His Asn Ile Gln Ile Thr His
      435                      440                      445

ccg ttt caa acc tcc aac cta tac att taa 1374
Pro Phe Gln Thr Ser Asn Leu Tyr Ile
      450                      455

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<210> 151
<211> 457
<212> PRT
<213> Macaca mulatta rhadinovirus 17577

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<400> 151
Met Phe Val Pro Trp Gln Leu Glu Thr Leu Met Arg His Trp Pro Ser
  1           5           10           15
Leu Arg Gly Leu Val Glu Gln Ser Phe Leu Pro Gly Thr Pro Asp Gly
      20           25           30
Ala Phe Asn Ser Pro Val Leu Ile His Thr Gln Asp Ser Leu Gln Pro
      35           40           45
Ala Ser Ser Cys Arg Val Cys Ser Leu Leu Phe Thr Leu Val Arg Thr
      50           55           60
Phe Pro Pro Pro Asp Ser Phe Phe Glu Asp Tyr Gly Trp Leu Cys Leu
      65           70           75           80
Thr Cys Leu Tyr Ala Pro Arg Ser Trp Thr Ala Thr Leu Met Val Ala
      85           90           95
Ala Asp Leu Leu Glu Leu Thr His Val Tyr Phe Pro Gln Cys Val Lys
      100          105          110
Asp Gly Pro Val Tyr Thr Ala Gln Ser Ile Leu Gly Ile Asp Val Gln
      115          120          125
Leu His Phe Phe Ala Thr Arg Cys Phe Arg Pro Ile Asp Arg Glu Gln
      130          135          140
Ile Leu His Thr Ser His Leu Asn Phe Leu Gln Thr Glu Phe Ile Arg

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145          150          155          160
Gly Met Leu Glu Gly Thr Ile Pro Gly Ser Phe Cys Phe Lys Thr Ser
          165          170          175
Trp Pro Arg Thr Glu Lys Asp Asp Gln Gln Pro Thr Val Ala Cys Cys
          180          185          190
Ser Val Gly Arg Gly Ser His Thr Asn Arg Asp Asn Arg Leu Pro Glu
          195          200          205
Asp Leu Glu Glu Ala Phe Asn Ser Thr Asn Ala Glu Glu Lys Pro Ser
          210          215          220
Leu Leu Gly Val Phe Ser Ala Thr Trp Ala Glu Ser Gln Leu Leu Gly
          225          230          235          240
Ser Asp Thr Gln Gln Ala Asp Thr His Leu Gln Pro Ser Ala Phe Pro
          245          250          255
Thr Pro Glu Asp Ala Asp Gln Ser Gln Gly Pro Cys Leu Met His Pro
          260          265          270
Thr Leu Asn Leu Lys Thr Lys Asn His Thr Ala Ser Ile Cys Val Leu
          275          280          285
Cys Glu Cys Leu Ala Ala His Pro Asp Ala Gly Pro Val Leu Lys Asp
          290          295          300
Leu Arg Arg Asp Ile Leu Glu Asn Met Glu Asn Asn Val Lys Leu Val
          305          310          315          320
Asn Arg Ile Ser Tyr Ile Leu Asn Asp Pro Asp Ser Leu Ser His Val
          325          330          335
Arg Asp Glu His Leu Arg Gly Leu Ile Lys Arg Cys Ser Ala Gln Glu
          340          345          350
Ile His Lys His Phe Phe Cys Asp Pro Val Cys Val Leu Asn Thr Tyr
          355          360          365
Ser His Cys Pro Ala Val Leu Phe Lys Cys Pro Pro Pro Glu Lys Tyr
          370          375          380
Lys Lys Leu Lys Ala Arg Leu Ala Thr Gly Glu Phe Leu Asp Cys Asn
          385          390          395          400
Arg Ile Phe Asp Cys Glu Thr Leu Gln Thr Leu Ala Val Leu Phe Lys
          405          410          415
Gly Ser Gln Leu Ala Lys Ile Gly Lys Thr Thr Ser Leu Glu Ile Ile
          420          425          430
Arg Glu Leu Gly Phe Gln Leu Arg Arg His Asn Ile Gln Ile Thr His
          435          440          445
Pro Phe Gln Thr Ser Asn Leu Tyr Ile
          450          455

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<210> 152
<211> 894
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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<220>
<221> CDS
<222> (1)..(894)

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<400> 152
atg cca aaa cag ccc aga agt cga ttg gcg tct cga gcg ccg tac gca 48
Met Pro Lys Gln Pro Arg Ser Arg Leu Ala Ser Arg Ala Pro Tyr Ala
  1              5              10              15

cct agc gtc agg cga ccg gac ggg ccc cag tcc acg cga ccg gca tcc 96
Pro Ser Val Arg Arg Pro Asp Gly Pro Gln Ser Thr Arg Pro Ala Ser
      20              25              30

agg cac ggc agc tgc aaa agc gaa atc atg cag tgg aaa aag tta gtt 144

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Arg	His	Gly	Ser	Cys	Lys	Ser	Glu	Ile	Met	Gln	Trp	Lys	Lys	Leu	Val		
		35					40					45					
tca	gac	acg	cag	ttt	ttt	tct	gcc	cta	acg	cgc	cgc	cac	gag	ctg	ggg	192	
Ser	Asp	Thr	Gln	Phe	Phe	Ser	Ala	Leu	Thr	Arg	Arg	His	Glu	Leu	Gly		
	50					55				60							
gtg	gac	ttt	tta	aga	gaa	atg	ggg	acc	ccg	ata	tgc	acc	tca	aag	tcc	240	
Val	Asp	Phe	Leu	Arg	Glu	Met	Gly	Thr	Pro	Ile	Cys	Thr	Ser	Lys	Ser		
	65				70				75					80			
gtt	atg	ttg	ccg	tta	aac	cta	aaa	acc	atc	gcc	ccg	ggg	cgg	tgc	gtc	288	
Val	Met	Leu	Pro	Leu	Asn	Leu	Lys	Thr	Ile	Ala	Pro	Gly	Arg	Cys	Val		
				85				90						95			
tct	ctc	tca	tca	ttc	gga	cac	tcg	tca	aac	atg	ggg	ttc	aac	tgt	tcg	336	
Ser	Leu	Ser	Ser	Phe	Gly	His	Ser	Ser	Asn	Met	Gly	Phe	Asn	Cys	Ser		
			100				105					110					
tcg	tgc	acg	cca	act	gac	agg	tca	gcg	gtg	tct	ctg	gac	gca	aac	gcg	384	
Ser	Cys	Thr	Pro	Thr	Asp	Arg	Ser	Ala	Val	Ser	Leu	Asp	Ala	Asn	Ala		
		115				120					125						
ctc	ggc	gaa	gat	tcc	gcc	agg	aaa	aac	agc	gag	ctg	tgt	tca	gtg	gcg	432	
Leu	Gly	Glu	Asp	Ser	Ala	Arg	Lys	Asn	Ser	Glu	Leu	Cys	Ser	Val	Ala		
	130				135					140							
tta	acc	ttt	tac	cac	cac	gcc	gaa	aag	gtc	gtg	cag	cac	aag	ggc	ttt	480	
Leu	Thr	Phe	Tyr	His	His	Ala	Glu	Lys	Val	Val	Gln	His	Lys	Gly	Phe		
	145				150				155					160			
tac	ctg	tct	ctg	ctc	agc	cac	tcc	atg	gaa	gtc	gtt	agg	aaa	agc	ttc	528	
Tyr	Leu	Ser	Leu	Ser	His	Ser	Met	Glu	Val	Val	Arg	Lys	Ser	Phe			
			165				170					175					
acg	caa	ccc	ggg	ttg	ctc	tac	gcc	cac	cta	gtc	cta	aaa	acc	ttt	ggc	576	
Thr	Gln	Pro	Gly	Leu	Leu	Tyr	Ala	His	Leu	Val	Leu	Lys	Thr	Phe	Gly		
		180				185						190					
cac	gat	cct	tta	cct	att	ttt	aca	gtc	gat	gcc	gat	gag	aga	ctc	gca	624	
His	Asp	Pro	Leu	Pro	Ile	Phe	Thr	Val	Asp	Ala	Asp	Glu	Arg	Leu	Ala		
	195				200					205							
ctc	tgg	gcg	gtg	ttc	cac	act	aga	gac	cta	cac	ctg	ggg	gaa	acc	agt	672	
Leu	Trp	Ala	Val	Phe	His	Thr	Arg	Asp	Leu	His	Leu	Gly	Glu	Thr	Ser		
	210				215						220						
ctg	cga	ctc	att	atg	gac	aac	ctt	cca	aat	tat	gac	ata	acg	gtg	gac	720	
Leu	Arg	Leu	Ile	Met	Asp	Asn	Leu	Pro	Asn	Tyr	Asp	Ile	Thr	Val	Asp		
	225				230				235					240			
tgc	atc	aag	caa	acg	tac	ata	atg	aag	ttt	aca	ccc	tcg	cga	ccg	gac	768	
Cys	Ile	Lys	Gln	Thr	Tyr	Ile	Met	Lys	Phe	Thr	Pro	Ser	Arg	Pro	Asp		
			245					250						255			
aac	gca	acc	gtg	acg	gtt	cct	gtc	aac	agc	att	tgc	gag	gcc	gtg	gcc	816	
Asn	Ala	Thr	Val	Thr	Val	Pro	Val	Asn	Ser	Ile	Cys	Glu	Ala	Val	Ala		
		260						265					270				
acc	cta	gac	tgc	acc	gac	gag	ttt	cga	gaa	gaa	att	caa	agg	ggc	acg	864	
Thr	Leu	Asp	Cys	Thr	Asp	Glu	Phe	Arg	Glu	Glu	Ile	Gln	Arg	Gly	Thr		

275

280

285

gcc atc ata aac tcc cag ggg cta ttg taa  
 Ala Ile Ile Asn Ser Gln Gly Leu Leu  
 290 295

894

<210> 153  
 <211> 297  
 <212> PRT  
 <213> Macaca mulatta rhadinovirus 17577

<400> 153  
 Met Pro Lys Gln Pro Arg Ser Arg Leu Ala Ser Arg Ala Pro Tyr Ala  
 1 5 10 15  
 Pro Ser Val Arg Arg Pro Asp Gly Pro Gln Ser Thr Arg Pro Ala Ser  
 20 25 30  
 Arg His Gly Ser Cys Lys Ser Glu Ile Met Gln Trp Lys Lys Leu Val  
 35 40 45  
 Ser Asp Thr Gln Phe Phe Ser Ala Leu Thr Arg Arg His Glu Leu Gly  
 50 55 60  
 Val Asp Phe Leu Arg Glu Met Gly Thr Pro Ile Cys Thr Ser Lys Ser  
 65 70 75 80  
 Val Met Leu Pro Leu Asn Leu Lys Thr Ile Ala Pro Gly Arg Cys Val  
 85 90 95  
 Ser Leu Ser Ser Phe Gly His Ser Ser Asn Met Gly Phe Asn Cys Ser  
 100 105 110  
 Ser Cys Thr Pro Thr Asp Arg Ser Ala Val Ser Leu Asp Ala Asn Ala  
 115 120 125  
 Leu Gly Glu Asp Ser Ala Arg Lys Asn Ser Glu Leu Cys Ser Val Ala  
 130 135 140  
 Leu Thr Phe Tyr His His Ala Glu Lys Val Val Gln His Lys Gly Phe  
 145 150 155 160  
 Tyr Leu Ser Leu Leu Ser His Ser Met Glu Val Val Arg Lys Ser Phe  
 165 170 175  
 Thr Gln Pro Gly Leu Leu Tyr Ala His Leu Val Leu Lys Thr Phe Gly  
 180 185 190  
 His Asp Pro Leu Pro Ile Phe Thr Val Asp Ala Asp Glu Arg Leu Ala  
 195 200 205  
 Leu Trp Ala Val Phe His Thr Arg Asp Leu His Leu Gly Glu Thr Ser  
 210 215 220  
 Leu Arg Leu Ile Met Asp Asn Leu Pro Asn Tyr Asp Ile Thr Val Asp  
 225 230 235 240  
 Cys Ile Lys Gln Thr Tyr Ile Met Lys Phe Thr Pro Ser Arg Pro Asp  
 245 250 255  
 Asn Ala Thr Val Thr Val Pro Val Asn Ser Ile Cys Glu Ala Val Ala  
 260 265 270  
 Thr Leu Asp Cys Thr Asp Glu Phe Arg Glu Glu Ile Gln Arg Gly Thr  
 275 280 285  
 Ala Ile Ile Asn Ser Gln Gly Leu Leu  
 290 295

<210> 154  
 <211> 525  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS

&lt;222&gt; (1) .. (525)

&lt;400&gt; 154

atg ttc ccg cat aag cgg tta gtg gac ttc ggt cgc cac cta gag gca 48  
 Met Phe Pro His Lys Arg Leu Val Asp Phe Gly Arg His Leu Glu Ala  
 1 5 10 15

gac gac aga gag gcc gtg ctg tgg ctt ttt gac cgg ccg gcg tcc gac 96  
 Asp Asp Arg Glu Ala Val Leu Trp Leu Phe Asp Arg Pro Ala Ser Asp  
 20 25 30

gat acg ccc gag ggg ttt gca aac ggg ctg tgc ccc tca act gga gaa 144  
 Asp Thr Pro Glu Gly Phe Ala Asn Gly Leu Cys Pro Ser Thr Gly Glu  
 35 40 45

ccc ggt att ccc ctc ccg gtg ttg ctg gag gcc gtg ttt ctc gtt ggg 192  
 Pro Gly Ile Pro Leu Pro Val Leu Leu Glu Ala Val Phe Leu Val Gly  
 50 55 60

cga ttg gac ctg gtc tcc acc ttt ttt tta cta gac gtg gga ttt att 240  
 Arg Leu Asp Leu Val Ser Thr Phe Phe Leu Leu Asp Val Gly Phe Ile  
 65 70 75 80

atc gag agg ctc cgg tcc agc ccc agt tac ttt agt cca tac aaa cac 288  
 Ile Glu Arg Leu Arg Ser Ser Pro Ser Tyr Phe Ser Pro Tyr Lys His  
 85 90 95

ctg atg ctc tcc att gac cgc cag ctg tca gaa agg gac gtg aaa aat 336  
 Leu Met Leu Ser Ile Asp Arg Gln Leu Ser Glu Arg Asp Val Lys Asn  
 100 105 110

tta gtt ttt cta acg ggc gac cag ctt ggt cgc agg cgc aac cag tca 384  
 Leu Val Phe Leu Thr Gly Asp Gln Leu Gly Arg Arg Arg Asn Gln Ser  
 115 120 125

ccc acc ttt ttt cgg tgg ctc tcg caa atg gaa aag gcg gcc ctg gtc 432  
 Pro Thr Phe Phe Arg Trp Leu Ser Gln Met Glu Lys Ala Ala Leu Val  
 130 135 140

agc ccc tca aac tac atg gtt tta agt gac ctg ctg cag gcc gtc tcc 480  
 Ser Pro Ser Asn Tyr Met Val Leu Ser Asp Leu Leu Gln Ala Val Ser  
 145 150 155 160

agg cgc gac gtg gcc aag gtc gtg gcc gcc aac gca ccc ggt taa 525  
 Arg Arg Asp Val Ala Lys Val Val Ala Ala Asn Ala Pro Gly  
 165 170 175

&lt;210&gt; 155

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 155

Met Phe Pro His Lys Arg Leu Val Asp Phe Gly Arg His Leu Glu Ala  
 1 5 10 15

Asp Asp Arg Glu Ala Val Leu Trp Leu Phe Asp Arg Pro Ala Ser Asp  
 20 25 30

Asp Thr Pro Glu Gly Phe Ala Asn Gly Leu Cys Pro Ser Thr Gly Glu  
 35 40 45

Pro Gly Ile Pro Leu Pro Val Leu Leu Glu Ala Val Phe Leu Val Gly



```

      50              55              60
Arg Leu Asp Leu Val Ser Thr Phe Phe Leu Leu Asp Val Gly Phe Ile
65              70              75              80
Ile Glu Arg Leu Arg Ser Ser Pro Ser Tyr Phe Ser Pro Tyr Lys His
      85              90              95
Leu Met Leu Ser Ile Asp Arg Gln Leu Ser Glu Arg Asp Val Lys Asn
      100             105             110
Leu Val Phe Leu Thr Gly Asp Gln Leu Gly Arg Arg Arg Asn Gln Ser
      115             120             125
Pro Thr Phe Phe Arg Trp Leu Ser Gln Met Glu Lys Ala Ala Leu Val
      130             135             140
Ser Pro Ser Asn Tyr Met Val Leu Ser Asp Leu Leu Gln Ala Val Ser
145             150             155             160
Arg Arg Asp Val Ala Lys Val Val Ala Ala Asn Ala Pro Gly
      165             170

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<210> 156  
 <211> 765  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(765)

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<400> 156
atg gct tct gtt ggc cca gtg ccc acc ggg acc att gac ccc gtc ctg 48
Met Ala Ser Val Gly Pro Val Pro Thr Gly Thr Ile Asp Pro Val Leu
  1              5              10              15

tac cag gac cgg gcc ctc tct aac ctc ctg gcc cac gaa gcg tcc ttt 96
Tyr Gln Asp Arg Ala Leu Ser Asn Leu Leu Ala His Glu Ala Ser Phe
      20              25              30

gta aca tcc acg gcc tgc tat ggg acg ata caa acg gag gtg acg gtg 144
Val Thr Ser Thr Ala Cys Tyr Gly Thr Ile Gln Thr Glu Val Thr Val
      35              40              45

ggc atg cga gtt atc ttg ggg acg tgg atg cgg tct gtt gcc agg gcc 192
Gly Met Arg Val Ile Leu Gly Thr Trp Met Arg Ser Val Ala Arg Ala
      50              55              60

cac cag gcg gat gct agc gtt ttc cca ctg gcc gtt agt att ctg gat 240
His Gln Ala Asp Ala Ser Val Phe Pro Leu Ala Val Ser Ile Leu Asp
      65              70              75              80

cgc tat cta gag tgt cgc agc atc ccc cgt cgg cgg ttt cag agg ctg 288
Arg Tyr Leu Glu Cys Arg Ser Ile Pro Arg Arg Arg Phe Gln Arg Leu
      85              90              95

ggg gcc gcc tgt cta ttt tta gcc ggc aag att aga gac ctg aat cct 336
Gly Ala Ala Cys Leu Phe Leu Ala Gly Lys Ile Arg Asp Leu Asn Pro
      100             105             110

ttc aag gcc gcc ttt tta tgc ttt tgc gcg gcg gag gat ttt tcc gtg 384
Phe Lys Ala Ala Phe Leu Cys Phe Cys Ala Ala Glu Asp Phe Ser Val
      115             120             125

gcg gat tta ctg aaa cag gaa aaa tca atc ctt aag gct tta agg tgg 432

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Ala Asp Leu Leu Lys Gln Glu Lys Ser Ile Leu Lys Ala Leu Arg Trp
  130                               135                               140

aaa cta gag gcc gtc tta cca acg gac gcc atc ggg ccc acc ctg ttt 480
Lys Leu Glu Ala Val Leu Pro Thr Asp Ala Ile Gly Pro Thr Leu Phe
145                               150                               155                               160

aaa agc ggc ttt aca aaa gag cag ctc ttt gcc ctt cac agc cag gtg 528
Lys Ser Gly Phe Thr Lys Glu Gln Leu Phe Ala Leu His Ser Gln Val
                               165                               170                               175

gtg gag tct gtt cac aaa gcc atc gtg aac ccg gcc acc ggc ggt ctg 576
Val Glu Ser Val His Lys Ala Ile Val Asn Pro Ala Thr Gly Gly Leu
                               180                               185                               190

ccc ccg tcc ctg gtg gcg gcc gcc tgc gcg ctg ttt agc ctc ggt gcc 624
Pro Pro Ser Leu Val Ala Ala Ala Cys Ala Leu Phe Ser Leu Gly Ala
                               195                               200                               205

gct gcg ccg cct ccg gcc aga ttg gcg gag gcc gtc ggc gtt tcg gcc 672
Ala Ala Pro Pro Pro Ala Arg Leu Ala Glu Ala Val Gly Val Ser Ala
                               210                               215                               220

gca acc ctc gcg gcc gcc gcc gag tcg gtt gcc acc acc ttg cgg gaa 720
Ala Thr Leu Ala Ala Ala Ala Glu Ser Val Ala Thr Thr Leu Arg Glu
225                               230                               235                               240

ttt gac gaa gac cac att tta agt aac gcc cgc ggt tcg tcg tga 765
Phe Asp Glu Asp His Ile Leu Ser Asn Ala Arg Gly Ser Ser
                               245                               250                               255

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<210> 157

<211> 254

<212> PRT

<213> Macaca mulatta rhadinovirus 17577

<400> 157

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Met Ala Ser Val Gly Pro Val Pro Thr Gly Thr Ile Asp Pro Val Leu
  1           5           10           15
Tyr Gln Asp Arg Ala Leu Ser Asn Leu Leu Ala His Glu Ala Ser Phe
           20           25           30
Val Thr Ser Thr Ala Cys Tyr Gly Thr Ile Gln Thr Glu Val Thr Val
           35           40           45
Gly Met Arg Val Ile Leu Gly Thr Trp Met Arg Ser Val Ala Arg Ala
           50           55           60
His Gln Ala Asp Ala Ser Val Phe Pro Leu Ala Val Ser Ile Leu Asp
           65           70           75           80
Arg Tyr Leu Glu Cys Arg Ser Ile Pro Arg Arg Arg Phe Gln Arg Leu
           85           90           95
Gly Ala Ala Cys Leu Phe Leu Ala Gly Lys Ile Arg Asp Leu Asn Pro
           100          105          110
Phe Lys Ala Ala Phe Leu Cys Phe Cys Ala Ala Glu Asp Phe Ser Val
           115          120          125
Ala Asp Leu Leu Lys Gln Glu Lys Ser Ile Leu Lys Ala Leu Arg Trp
           130          135          140
Lys Leu Glu Ala Val Leu Pro Thr Asp Ala Ile Gly Pro Thr Leu Phe
           145          150          155          160
Lys Ser Gly Phe Thr Lys Glu Gln Leu Phe Ala Leu His Ser Gln Val
           165          170          175
Val Glu Ser Val His Lys Ala Ile Val Asn Pro Ala Thr Gly Gly Leu

```

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          180          185          190
Pro Pro Ser Leu Val Ala Ala Ala Cys Ala Leu Phe Ser Leu Gly Ala
          195          200          205
Ala Ala Pro Pro Pro Ala Arg Leu Ala Glu Ala Val Gly Val Ser Ala
          210          215          220
Ala Thr Leu Ala Ala Ala Ala Glu Ser Val Ala Thr Thr Leu Arg Glu
225          230          235          240
Phe Asp Glu Asp His Ile Leu Ser Asn Ala Arg Gly Ser Ser
          245          250

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<210> 158  
 <211> 1347  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(1347)

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<400> 158
atg tgg ggc agc cgg caa cat cgt tcc ggc ata gta tcg gga cac ggg 48
Met Trp Gly Ser Arg Gln His Arg Ser Gly Ile Val Ser Gly His Gly
  1          5          10          15

ttg cga agt tcc tgc agg gga cat tgc gga aga cgc ggc ggc act aga 96
Leu Arg Ser Ser Cys Arg Gly His Cys Gly Arg Arg Gly Gly Thr Arg
          20          25          30

gaa cag gcc ggg agg cgc ggc agg ggg cgt ggc acg gcc gcg cca gcc 144
Glu Gln Ala Gly Arg Arg Gly Arg Gly Arg Gly Thr Ala Ala Pro Ala
          35          40          45

gcc gca ccc gcg ccc ccc gct cca aca aca tca ggg ccg caa gtg cgg 192
Ala Ala Pro Ala Pro Pro Ala Pro Thr Thr Ser Gly Pro Gln Val Arg
          50          55          60

gcg gtt gca gaa caa ggg cac gga tcg gac acc gaa acg gcc acc gaa 240
Ala Val Ala Glu Gln Gly His Gly Ser Asp Thr Glu Thr Ala Thr Glu
          65          70          75          80

tcc agg cac ggg tca tcc caa ggg tcg cca tca ggg tca ggg tct gag 288
Ser Arg His Gly Ser Ser Gln Gly Ser Pro Ser Gly Ser Gly Ser Glu
          85          90          95

tcc gtc atc gtg ttg gga tct cca acg ccg tcg cca agc ggg tct gcg 336
Ser Val Ile Val Leu Gly Ser Pro Thr Pro Ser Pro Ser Gly Ser Ala
          100          105          110

ccg gtg tta gct tca ggc ctg tca cct caa aac acg tca ggg tcg tcc 384
Pro Val Leu Ala Ser Gly Leu Ser Pro Gln Asn Thr Ser Gly Ser Ser
          115          120          125

ccg gca tcc ccc gca tcg cat tcg ccc cca cca tca ccc ccg tca cac 432
Pro Ala Ser Pro Ala Ser His Ser Pro Pro Pro Ser Pro Pro Ser His
          130          135          140

ccc ggc ccc cac tca cct gca ccg ccg tcg tcg cat aat cca tcg ccc 480
Pro Gly Pro His Ser Pro Ala Pro Pro Ser Ser His Asn Pro Ser Pro
145          150          155          160

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aat cag cag cct tcg tcg ttt ttg caa cca tcg cac cac gac tca cct	528
Asn Gln Gln Pro Ser Ser Phe Leu Gln Pro Ser His His Asp Ser Pro	
165 170 175	
gaa ccg cct gag cct ccg acg tcc ttg ccc cct ccc gac tca cct gga	576
Glu Pro Pro Glu Pro Pro Thr Ser Leu Pro Pro Pro Asp Ser Pro Gly	
180 185 190	
ccg cca caa tcg cca acg ccg acg tcc tcg ccc cct ccg caa tcc ccg	624
Pro Pro Gln Ser Pro Thr Pro Thr Ser Pro Pro Pro Gln Ser Pro	
195 200 205	
ccc gac tca ccg gga cca ccc caa tcg cca acg cct caa cag gcc cca	672
Pro Asp Ser Pro Gly Pro Pro Gln Ser Pro Thr Pro Gln Gln Ala Pro	
210 215 220	
tcc cct aac acg caa cag gcg gtg agc cac aca gac cac ccc acc ggg	720
Ser Pro Asn Thr Gln Gln Ala Val Ser His Thr Asp His Pro Thr Gly	
225 230 235 240	
ccg tct cgg cca gga ccc ccg ttt cct ggc cat aca tcc cac tcg tac	768
Pro Ser Arg Pro Gly Pro Pro Phe Pro Gly His Thr Ser His Ser Tyr	
245 250 255	
acc gta ggg ggt tgg ggt cca ccc acg cgt gcc gga gga gtt cct tgt	816
Thr Val Gly Gly Trp Gly Pro Pro Thr Arg Ala Gly Gly Val Pro Cys	
260 265 270	
tta cgt ctc aga tgc acg agt cac aac tcc cac gag gac gaa gct cct	864
Leu Arg Leu Arg Cys Thr Ser His Asn Ser His Glu Asp Glu Ala Pro	
275 280 285	
gaa aga caa cag gag caa gag ggg gag gag cgg cag cag caa ccg gcg	912
Glu Arg Gln Gln Glu Gln Glu Gly Glu Glu Arg Gln Gln Gln Pro Ala	
290 295 300	
cgc ccc ccg cgc ccc ccg cgc ccg ccg cga tac ccc att ccc ata ccg	960
Arg Pro Pro Arg Pro Pro Arg Pro Pro Arg Tyr Pro Ile Pro Ile Pro	
305 310 315 320	
tat ccc tca tca gag gaa gag gta ccc aga aaa tac cgc cca cag aga	1008
Tyr Pro Ser Ser Glu Glu Val Pro Arg Lys Tyr Arg Pro Gln Arg	
325 330 335	
aga ttt tat cgt cag gta ttg gga ccc agg atc gac ccc cct ccg ccg	1056
Arg Phe Tyr Arg Gln Val Leu Gly Pro Arg Ile Asp Pro Pro Arg Pro	
340 345 350	
ggc ccg tgg tgt cac gga gtc atc ttt tgt aac tca gac ccc tat tca	1104
Gly Pro Trp Cys His Gly Val Ile Phe Cys Asn Ser Asp Pro Tyr Ser	
355 360 365	
ctg tat cgc ctg gca agg tgc cta cag ttt ccc ggc att aga gca tcc	1152
Leu Tyr Arg Leu Ala Arg Cys Leu Gln Phe Pro Gly Ile Arg Ala Ser	
370 375 380	
agc gtc cgc gtt ttg ccg gac gca cct ggc agt ccc gtc atc ccg gct	1200
Ser Val Arg Val Leu Pro Asp Ala Pro Gly Ser Pro Val Ile Pro Ala	
385 390 395 400	

ttt tgc att acg gtg ttc tgt caa agc cgc gga acc gcc aag gcc gtc 1248  
 Phe Cys Ile Thr Val Phe Cys Gln Ser Arg Gly Thr Ala Lys Ala Val  
                     405                    410                    415

aaa aag gcc cgt cgc cgg tgg gaa cga cat cac cca tcc gcc ccc cac 1296  
 Lys Lys Ala Arg Arg Arg Trp Glu Arg His His Pro Ser Ala Pro His  
                     420                    425                    430

ttc cag gcc agc ata gtg cgc atg gac aga gga ctg cca att cag cac 1344  
 Phe Gln Ala Ser Ile Val Arg Met Asp Arg Gly Leu Pro Ile Gln His  
                     435                    440                    445

taa 1347

<210> 159

<211> 448

<212> PRT

<213> Macaca mulatta rhadinovirus 17577

<400> 159

Met Trp Gly Ser Arg Gln His Arg Ser Gly Ile Val Ser Gly His Gly  
   1                    5                    10                    15  
 Leu Arg Ser Ser Cys Arg Gly His Cys Gly Arg Arg Gly Gly Thr Arg  
                     20                    25                    30  
 Glu Gln Ala Gly Arg Arg Gly Arg Gly Arg Gly Thr Ala Ala Pro Ala  
                     35                    40                    45  
 Ala Ala Pro Ala Pro Pro Ala Pro Thr Thr Ser Gly Pro Gln Val Arg  
                     50                    55                    60  
 Ala Val Ala Glu Gln Gly His Gly Ser Asp Thr Glu Thr Ala Thr Glu  
                     65                    70                    75                    80  
 Ser Arg His Gly Ser Ser Gln Gly Ser Pro Ser Gly Ser Gly Ser Glu  
                     85                    90                    95  
 Ser Val Ile Val Leu Gly Ser Pro Thr Pro Ser Pro Ser Gly Ser Ala  
                     100                    105                    110  
 Pro Val Leu Ala Ser Gly Leu Ser Pro Gln Asn Thr Ser Gly Ser Ser  
                     115                    120                    125  
 Pro Ala Ser Pro Ala Ser His Ser Pro Pro Pro Ser Pro Pro Ser His  
                     130                    135                    140  
 Pro Gly Pro His Ser Pro Ala Pro Pro Ser Ser His Asn Pro Ser Pro  
                     145                    150                    155                    160  
 Asn Gln Gln Pro Ser Ser Phe Leu Gln Pro Ser His His Asp Ser Pro  
                     165                    170                    175  
 Glu Pro Pro Glu Pro Pro Thr Ser Leu Pro Pro Pro Asp Ser Pro Gly  
                     180                    185                    190  
 Pro Pro Gln Ser Pro Thr Pro Thr Ser Ser Pro Pro Pro Gln Ser Pro  
                     195                    200                    205  
 Pro Asp Ser Pro Gly Pro Pro Gln Ser Pro Thr Pro Gln Gln Ala Pro  
                     210                    215                    220  
 Ser Pro Asn Thr Gln Gln Ala Val Ser His Thr Asp His Pro Thr Gly  
                     225                    230                    235                    240  
 Pro Ser Arg Pro Gly Pro Pro Phe Pro Gly His Thr Ser His Ser Tyr  
                     245                    250                    255  
 Thr Val Gly Gly Trp Gly Pro Pro Thr Arg Ala Gly Gly Val Pro Cys  
                     260                    265                    270  
 Leu Arg Leu Arg Cys Thr Ser His Asn Ser His Glu Asp Glu Ala Pro  
                     275                    280                    285  
 Glu Arg Gln Gln Glu Gln Glu Gly Glu Glu Arg Gln Gln Gln Pro Ala  
                     290                    295                    300  
 Arg Pro Pro Arg Pro Pro Arg Pro Pro Arg Tyr Pro Ile Pro Ile Pro

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305          310          315          320
Tyr Pro Ser Ser Glu Glu Glu Val Pro Arg Lys Tyr Arg Pro Gln Arg
          325          330          335
Arg Phe Tyr Arg Gln Val Leu Gly Pro Arg Ile Asp Pro Pro Arg Pro
          340          345          350
Gly Pro Trp Cys His Gly Val Ile Phe Cys Asn Ser Asp Pro Tyr Ser
          355          360          365
Leu Tyr Arg Leu Ala Arg Cys Leu Gln Phe Pro Gly Ile Arg Ala Ser
          370          375          380
Ser Val Arg Val Leu Pro Asp Ala Pro Gly Ser Pro Val Ile Pro Ala
385          390          395          400
Phe Cys Ile Thr Val Phe Cys Gln Ser Arg Gly Thr Ala Lys Ala Val
          405          410          415
Lys Lys Ala Arg Arg Arg Trp Glu Arg His His Pro Ser Ala Pro His
          420          425          430
Phe Gln Ala Ser Ile Val Arg Met Asp Arg Gly Leu Pro Ile Gln His
          435          440          445

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<210> 160
<211> 762
<212> DNA
<213> Macaca mulatta rhadinovirus 17577

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<220>
<221> CDS
<222> (1)..(762)

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<400> 160
atg tcg gga gga att aca tta acg ctg ctg ctg gcg acg ctt gcc acg 48
Met Ser Gly Gly Ile Thr Leu Thr Leu Leu Ala Thr Leu Ala Thr
   1             5             10             15

gtt cgg tgc gct ctt caa acg cac tat gcg gcg gtc ccc gtg cac tct 96
Val Arg Cys Ala Leu Gln Thr His Tyr Ala Ala Val Pro Val His Ser
          20             25             30

acc gcg tcc ctg ggg tgc gtg tta acg aca ccc cac gac gtt ctt atc 144
Thr Ala Ser Leu Gly Cys Val Leu Thr Thr Pro His Asp Val Leu Ile
          35             40             45

gtt acc tgg caa aaa cag gaa tcg cct agt ccc gtt aac gtg gcc aca 192
Val Thr Trp Gln Lys Gln Glu Ser Pro Ser Pro Val Asn Val Ala Thr
          50             55             60

tat agt tcc gaa gcg ggc acg gtg gtt cag ccc ccg ttc gcc ggt agg 240
Tyr Ser Ser Glu Ala Gly Thr Val Val Gln Pro Pro Phe Ala Gly Arg
          65             70             75             80

gtt gac att ccc gaa cac aag ttg acc aga acg acc ctg aag ttt ttt 288
Val Asp Ile Pro Glu His Lys Leu Thr Arg Thr Thr Leu Lys Phe Phe
          85             90             95

aat gcc acc ctg gag gac gag ggg tgc tac ctg tgt atc ttt aac gcg 336
Asn Ala Thr Leu Glu Asp Glu Gly Cys Tyr Leu Cys Ile Phe Asn Ala
          100            105            110

ttt gga gtg gga aag ctg tcg gga acc gcc tgc ttg acg gtt tac gtc 384
Phe Gly Val Gly Lys Leu Ser Gly Thr Ala Cys Leu Thr Val Tyr Val
          115            120            125

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ccc ctg tcc atg tcc gtc acg ttt tac ccc ccg att aac ccg acg cag 432
Pro Leu Ser Met Ser Val Thr Phe Tyr Pro Pro Ile Asn Pro Thr Gln
    130                      135                      140

ctc gtc tgt cgg gcc gag gcc agt ccc gca ccg tcg gtc aac tgg acc 480
Leu Val Cys Arg Ala Glu Ala Ser Pro Ala Pro Ser Val Asn Trp Thr
    145                      150                      155                      160

ggc gtg ccg ccc gag ctg tgc agc gaa cct gaa gtg ttt ccc cgg ccc 528
Gly Val Pro Pro Glu Leu Cys Ser Glu Pro Glu Val Phe Pro Arg Pro
    165                      170                      175

aac gga aca acc ctg gtt gtg ggt cgc tgc aac gta acg tcg gtg gac 576
Asn Gly Thr Thr Leu Val Val Gly Arg Cys Asn Val Thr Ser Val Asp
    180                      185                      190

ccc gaa gac ctt gag aac gcc acg tgc ctg gtc act cat ata ggc ggt 624
Pro Glu Asp Leu Glu Asn Ala Thr Cys Leu Val Thr His Ile Gly Gly
    195                      200                      205

ttg gcc gcg gcg cgg ccc ctg gac ccc gtg ttt tcg gat ccc ctg gaa 672
Leu Ala Ala Ala Arg Pro Leu Asp Pro Val Phe Ser Asp Pro Leu Glu
    210                      215                      220

ggg acg agc cac tac gtg gtg ggt gtg gtg gca gcg gcc gcc gtt tta 720
Gly Thr Ser His Tyr Val Val Gly Val Val Ala Ala Ala Ala Val Leu
    225                      230                      235                      240

ggc att ttt tta acg ggt gtt ttt ttg tat agg tct atg tga 762
Gly Ile Phe Leu Thr Gly Val Phe Leu Tyr Arg Ser Met
    245                      250

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<210> 161
<211> 253
<212> PRT
<213> Macaca mulatta rhadinovirus 17577

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<400> 161
Met Ser Gly Gly Ile Thr Leu Thr Leu Leu Leu Ala Thr Leu Ala Thr
  1           5           10           15
Val Arg Cys Ala Leu Gln Thr His Tyr Ala Ala Val Pro Val His Ser
    20           25           30
Thr Ala Ser Leu Gly Cys Val Leu Thr Thr Pro His Asp Val Leu Ile
    35           40           45
Val Thr Trp Gln Lys Gln Glu Ser Pro Ser Pro Val Asn Val Ala Thr
    50           55           60
Tyr Ser Ser Glu Ala Gly Thr Val Val Gln Pro Pro Phe Ala Gly Arg
    65           70           75           80
Val Asp Ile Pro Glu His Lys Leu Thr Arg Thr Thr Leu Lys Phe Phe
    85           90           95
Asn Ala Thr Leu Glu Asp Glu Gly Cys Tyr Leu Cys Ile Phe Asn Ala
    100          105          110
Phe Gly Val Gly Lys Leu Ser Gly Thr Ala Cys Leu Thr Val Tyr Val
    115          120          125
Pro Leu Ser Met Ser Val Thr Phe Tyr Pro Pro Ile Asn Pro Thr Gln
    130          135          140
Leu Val Cys Arg Ala Glu Ala Ser Pro Ala Pro Ser Val Asn Trp Thr
    145          150          155          160
Gly Val Pro Pro Glu Leu Cys Ser Glu Pro Glu Val Phe Pro Arg Pro

```





Cys Leu Leu Val Val Phe Ser Arg Arg Pro Trp Val Lys His Gly Ala  
 145 150 155 160  
 tcc ggc ttt ctc tgc gtg tgt gtg tct tta atc gtg gcg ctg gcg ctg 528  
 Ser Gly Phe Leu Cys Val Cys Val Ser Leu Ile Val Ala Leu Ala Leu  
 165 170 175  
 tct gcc aac gcg agc ctc tat agg acg gcc ctg cgt cac cca gag acc 576  
 Ser Ala Asn Ala Ser Leu Tyr Arg Thr Ala Leu Arg His Pro Glu Thr  
 180 185 190  
 agc gag tgg ata tgc tac gaa gat gcc ggg gaa gat acc gtc aac tgg 624  
 Ser Glu Trp Ile Cys Tyr Glu Asp Ala Gly Glu Asp Thr Val Asn Trp  
 195 200 205  
 aag ctg aga atc aga acc acc agc gcg atc tgc ggg ttt ttg gtt ccg 672  
 Lys Leu Arg Ile Arg Thr Thr Ser Ala Ile Cys Gly Phe Leu Val Pro  
 210 215 220  
 ttt ggg ctg atg gtg ctc ttt tac gga ctt acg tgg tgt atg gtt aaa 720  
 Phe Gly Leu Met Val Leu Phe Tyr Gly Leu Thr Trp Cys Met Val Lys  
 225 230 235 240  
 agc acg aag ctg gcc aga aag gga gcc gtt agg ggt gta att gtg acg 768  
 Ser Thr Lys Leu Ala Arg Lys Gly Ala Val Arg Gly Val Ile Val Thr  
 245 250 255  
 gtg gtg gtg ctg ttt tta att ttt tgc ctg ccc tat cac ctg tgc aac 816  
 Val Val Val Leu Phe Leu Ile Phe Cys Leu Pro Tyr His Leu Cys Asn  
 260 265 270  
 ttt ttt gac acc ctg ttg agg acc ggt ttt ctg gcc gaa acg tgc tac 864  
 Phe Phe Asp Thr Leu Leu Arg Thr Gly Phe Leu Ala Glu Thr Cys Tyr  
 275 280 285  
 ctc agg gac gtg atc agc gtg gcc atg cac ata tgc tcc ctg cta cag 912  
 Leu Arg Asp Val Ile Ser Val Ala Met His Ile Cys Ser Leu Leu Gln  
 290 295 300  
 agc atg tat agc gcg ttc gtg cca gtc gtg tat tct ggt ctt ggg tct 960  
 Ser Met Tyr Ser Ala Phe Val Pro Val Val Tyr Ser Gly Leu Gly Ser  
 305 310 315 320  
 ctg ttt agg aga agg gtt agg gat acc tgg tcc gtg ttt agg tgt ttt 1008  
 Leu Phe Arg Arg Arg Val Arg Asp Thr Trp Ser Val Phe Arg Cys Phe  
 325 330 335  
 tcc act tca ggt agt tta tga 1029  
 Ser Thr Ser Gly Ser Leu  
 340

&lt;210&gt; 163

&lt;211&gt; 342

&lt;212&gt; PRT

&lt;213&gt; Macaca mulatta rhadinovirus 17577

&lt;400&gt; 163

Met Asp Ala Leu Asn Asn Asn Leu Asn Leu Leu Met Asp Phe Leu Ser  
 1 5 10 15  
 Asn Tyr Ser Asn Ser Tyr Ser Ser Tyr Asp Asp Asn Met Ser Tyr Thr

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      20      25      30
Leu Asp Thr Glu Ser Thr Leu Cys Arg Leu Thr Val Val Phe Pro Pro
      35      40      45
Thr Val Tyr Ala Ile Ile Cys Phe Phe Ile Phe Cys Ile Thr Leu Phe
      50      55      60
Gly Asn Ala Leu Val Leu Tyr Ile Phe Phe Lys Phe Lys Ala Leu Ala
      65      70      75      80
Asn Ser Val Asp Val Leu Met Ala Gly Leu Cys Cys Asn Ser Leu Phe
      85      90      95
Leu Cys Ala Ser Phe Leu Phe Ser Trp Leu Leu Tyr Val Ala Pro Gln
      100      105      110
Met Leu Thr Ser Ala Thr Cys Lys Val Glu Ile Phe Phe Phe Tyr Leu
      115      120      125
Tyr Thr Tyr Phe Gly Val Tyr Ile Val Val Cys Ile Ser Leu Ile Arg
      130      135      140
Cys Leu Leu Val Val Phe Ser Arg Arg Pro Trp Val Lys His Gly Ala
      145      150      155      160
Ser Gly Phe Leu Cys Val Cys Val Ser Leu Ile Val Ala Leu Ala Leu
      165      170      175
Ser Ala Asn Ala Ser Leu Tyr Arg Thr Ala Leu Arg His Pro Glu Thr
      180      185      190
Ser Glu Trp Ile Cys Tyr Glu Asp Ala Gly Glu Asp Thr Val Asn Trp
      195      200      205
Lys Leu Arg Ile Arg Thr Thr Ser Ala Ile Cys Gly Phe Leu Val Pro
      210      215      220
Phe Gly Leu Met Val Leu Phe Tyr Gly Leu Thr Trp Cys Met Val Lys
      225      230      235      240
Ser Thr Lys Leu Ala Arg Lys Gly Ala Val Arg Gly Val Ile Val Thr
      245      250      255
Val Val Val Leu Phe Leu Ile Phe Cys Leu Pro Tyr His Leu Cys Asn
      260      265      270
Phe Phe Asp Thr Leu Leu Arg Thr Gly Phe Leu Ala Glu Thr Cys Tyr
      275      280      285
Leu Arg Asp Val Ile Ser Val Ala Met His Ile Cys Ser Leu Leu Gln
      290      295      300
Ser Met Tyr Ser Ala Phe Val Pro Val Val Tyr Ser Gly Leu Gly Ser
      305      310      315      320
Leu Phe Arg Arg Arg Val Arg Asp Thr Trp Ser Val Phe Arg Cys Phe
      325      330      335
Ser Thr Ser Gly Ser Leu
      340

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<210> 164  
 <211> 3897  
 <212> DNA  
 <213> Macaca mulatta rhadinovirus 17577

<220>  
 <221> CDS  
 <222> (1)..(3897)

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<400> 164
atg gcc caa cgc acg aac cct cgc tgg gcc gct gca gcc ctt agt cca 48
Met Ala Gln Arg Thr Asn Pro Arg Trp Ala Ala Ala Leu Ser Pro
      1      5      10      15

gaa gag gag gct ttt att cat gac aat tcg gac gca gaa agt gtt ttg 96
Glu Glu Glu Ala Phe Ile His Asp Asn Ser Asp Ala Glu Ser Val Leu
      20      25      30

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gcg ctt gtg cca gaa cag tgc ttt agt gaa ttt tta ctt tgg ctt gta	144
Ala Leu Val Pro Glu Gln Cys Phe Ser Glu Phe Leu Leu Trp Leu Val	
35 40 45	
aca cgc ccc tct gat aac ttt gac aac gac gat gac gac cca gcg ctg	192
Thr Arg Pro Ser Asp Asn Phe Asp Asn Asp Asp Asp Pro Ala Leu	
50 55 60	
ggc gtt atc tgg cat ctt ctg gcg cct ctg gtt aat tat gca cct ctg	240
Gly Val Ile Trp His Leu Leu Ala Pro Leu Val Asn Tyr Ala Pro Leu	
65 70 75 80	
gaa act cgg tgc gcg cac ctc cag ggc cat cat act ata tcc ctg ccc	288
Glu Thr Arg Ser Ala His Leu Gln Gly His His Thr Ile Ser Leu Pro	
85 90 95	
tat ggc cca gac ctg atg cgc caa cct acc aca aga tct agc gaa ata	336
Tyr Gly Pro Asp Leu Met Arg Gln Pro Thr Thr Arg Ser Ser Glu Ile	
100 105 110	
gtg cag tgc ctt aga gac agc ggc ctc gat aga acg ttg cgg tta gag	384
Val Gln Cys Leu Arg Asp Ser Gly Leu Asp Arg Thr Leu Arg Leu Glu	
115 120 125	
gtg ggc aga cat ctg agc tgc cag acg aga cgg ttt gtc gcc gat cgg	432
Val Gly Arg His Leu Ser Cys Gln Thr Arg Arg Phe Val Ala Asp Arg	
130 135 140	
gta ccc ccg ggc acc ttg gcc gcc ctg aca ctt ggc aca cta gta gaa	480
Val Pro Pro Gly Thr Leu Ala Ala Leu Thr Leu Gly Thr Leu Val Glu	
145 150 155 160	
tat gat gtg cgc gtg cag cgc cag ctc ccg gtg aca ttg caa tcc acc	528
Tyr Asp Val Arg Val Gln Arg Gln Leu Pro Val Thr Leu Gln Ser Thr	
165 170 175	
gcc tgg aga ccg ttg ccc gag aga gac cca ata tgc gcc gcg gtg atg	576
Ala Trp Arg Pro Leu Pro Glu Arg Asp Pro Ile Cys Ala Ala Val Met	
180 185 190	
ctc ccg tta caa cgg aac ata tta ccg ctg gcc gtg cag gcc tcc aac	624
Leu Pro Leu Gln Arg Asn Ile Leu Pro Leu Ala Val Gln Ala Ser Asn	
195 200 205	
ggc aac agc tat acg gtg tcc aga tac gcc gtc atg gcc cgc agg agc	672
Gly Asn Ser Tyr Thr Val Ser Arg Tyr Ala Val Met Ala Arg Arg Ser	
210 215 220	
tac agc tgc gtt ttc cag cgc ctc ccg tgc gaa aac gta acc cac ata	720
Tyr Ser Cys Val Phe Gln Arg Leu Pro Cys Glu Asn Val Thr His Ile	
225 230 235 240	
gct gac tca ttt aca cac ctg cac agc gcc att cag aca ggt gca ggt	768
Ala Asp Ser Phe Thr His Leu His Ser Ala Ile Gln Thr Gly Ala Gly	
245 250 255	
gcg ctg caa aac att ctg ttc cat gcc acg ctg ctg ccc ggg ggc gaa	816
Ala Leu Gln Asn Ile Leu Phe His Ala Thr Leu Leu Pro Gly Gly Glu	
260 265 270	

atc aga tcg gcc ctg tgt gga ttt tac gcc act acg ccg tca gtg ggc	864
Ile Arg Ser Ala Leu Cys Gly Phe Tyr Ala Thr Thr Pro Ser Val Gly	
275 280 285	
gca ttt tct cgc gca cgc cac aga gct att aac aca aca gcg aca ctc	912
Ala Phe Ser Arg Ala Arg His Arg Ala Ile Asn Thr Thr Ala Thr Leu	
290 295 300	
cac tgc cag cag ctg gcg cgc acc ggc acg cct gtc ctc ggt ggc ttt	960
His Cys Gln Gln Leu Ala Arg Thr Gly Thr Pro Val Leu Gly Gly Phe	
305 310 315 320	
ctt aaa acc gtc cac agc gcc acc acc agc gag gcg aac gtt att acc	1008
Leu Lys Thr Val His Ser Ala Thr Thr Ser Glu Ala Asn Val Ile Thr	
325 330 335	
acc aca tcg ctg tta tcg tgc gtg cct caa gca tac aca ttc ctc agg	1056
Thr Thr Ser Leu Leu Ser Cys Val Pro Gln Ala Tyr Thr Phe Leu Arg	
340 345 350	
agg tct tta ttc agt cag cct atc atc tgt ctt ggg tct ttt gaa ccc	1104
Arg Ser Leu Phe Ser Gln Pro Ile Ile Cys Leu Gly Ser Phe Glu Pro	
355 360 365	
gtt gac ggc gat ggc aac cag cgc tcg ctt tac ctg ggg agc gcc gca	1152
Val Asp Gly Asp Gly Asn Gln Arg Ser Leu Tyr Leu Gly Ser Ala Ala	
370 375 380	
ggc att acc cgc atc acc caa acg ttg tcg ctg gct tac gag att ttg	1200
Gly Ile Thr Arg Ile Thr Gln Thr Leu Ser Leu Ala Tyr Glu Ile Leu	
385 390 395 400	
gaa ggg ccc cta ttt acc agc att aat cgc gcc cat gaa ccc gcc tct	1248
Glu Gly Pro Leu Phe Thr Ser Ile Asn Arg Ala His Glu Pro Ala Ser	
405 410 415	
gtc atc ggc cac ctg gga gcc ctg gtc tcg cgg ggc ggc ctg cgc ctc	1296
Val Ile Gly His Leu Gly Ala Leu Val Ser Arg Gly Gly Leu Arg Leu	
420 425 430	
ttt gtc tct cag ctt cca cca acc att ctg agc caa ctg acc gcc acg	1344
Phe Val Ser Gln Leu Pro Pro Thr Ile Leu Ser Gln Leu Thr Ala Thr	
435 440 445	
cca gac atc tca cgg gaa acc gtg aac gac atc cta gtt aac aag ttt	1392
Pro Asp Ile Ser Arg Glu Thr Val Asn Asp Ile Leu Val Asn Lys Phe	
450 455 460	
ctc aac gtg tct gcc tgc gtg gtc ttt gcc gtc ctc ccg cgc gac acg	1440
Leu Asn Val Ser Ala Cys Val Val Phe Ala Val Leu Pro Arg Asp Thr	
465 470 475 480	
gag ccg gaa ccg ggc ccg ttg gat gcc atc agg agg gcc gca cgc atc	1488
Glu Pro Glu Pro Gly Pro Leu Asp Ala Ile Arg Arg Ala Ala Arg Ile	
485 490 495	
tgc gga tgc cct ttc gcc gtc gtt ggg gaa acc tgc gaa gag ctt gga	1536
Cys Gly Cys Pro Phe Ala Val Val Gly Glu Thr Cys Glu Glu Leu Gly	
500 505 510	
att cag ttc gtg aac gac ctg gag ctg tgg aac ccg gga gcg tgg ccg	1584

Ile	Gln	Phe	Val	Asn	Asp	Leu	Glu	Leu	Trp	Asn	Pro	Gly	Ala	Trp	Pro		
		515					520					525					
atc	aga	cag	cca	aca	tcg	gcc	gaa	gtc	atc	gca	act	ttt	ggg	ttc	gac	1632	
Ile	Arg	Gln	Pro	Thr	Ser	Ala	Glu	Val	Ile	Ala	Thr	Phe	Gly	Phe	Asp		
	530					535					540						
gag	cag	ccc	gtt	tcc	tcc	aac	tgg	ctg	gtg	cgc	cca	gaa	gaa	cct	gag	1680	
Glu	Gln	Pro	Val	Ser	Ser	Asn	Trp	Leu	Val	Arg	Pro	Glu	Glu	Pro	Glu		
	545				550					555					560		
gat	ggt	ggc	gaa	cag	gca	ccc	tcg	ccg	acc	gac	tgg	ggc	cta	ttc	cgc	1728	
Asp	Gly	Gly	Glu	Gln	Ala	Pro	Ser	Pro	Thr	Asp	Trp	Gly	Leu	Phe	Arg		
				565					570					575			
ctg	gcc	tcc	gtg	gtc	gat	cag	ctt	ctg	cga	tgt	ccg	acg	gtt	ggc	agc	1776	
Leu	Ala	Ser	Val	Val	Asp	Gln	Leu	Leu	Arg	Cys	Pro	Thr	Val	Gly	Ser		
			580					585						590			
aaa	gag	ttt	gtc	acg	cga	cac	gtg	gac	aga	tgc	tcc	aac	gga	ctc	gtg	1824	
Lys	Glu	Phe	Val	Thr	Arg	His	Val	Asp	Arg	Cys	Ser	Asn	Gly	Leu	Val		
		595					600					605					
gct	cag	cag	tgc	gaa	gtg	gga	ccc	ctg	ggc	cgg	ccg	ctg	tca	gat	tac	1872	
Ala	Gln	Gln	Cys	Glu	Val	Gly	Pro	Leu	Gly	Arg	Pro	Leu	Ser	Asp	Tyr		
	610					615					620						
cac	att	gtc	aac	cac	acg	tcg	gtg	ttt	acg	gac	aga	atg	gcg	cgg	gtg	1920	
His	Ile	Val	Asn	His	Thr	Ser	Val	Phe	Thr	Asp	Arg	Met	Ala	Arg	Val		
	625				630					635					640		
ccc	ata	tat	cgc	ccc	cag	ccg	atc	acc	agg	cag	gac	gcg	acg	gaa	cgc	1968	
Pro	Ile	Tyr	Arg	Pro	Gln	Pro	Ile	Thr	Arg	Gln	Asp	Ala	Thr	Glu	Arg		
				645					650					655			
ctg	gtt	agc	cca	gaa	acc	tgg	gtc	acc	cag	ggc	agg	ggc	agg	aac	cgg	2016	
Leu	Val	Ser	Pro	Glu	Thr	Trp	Val	Thr	Gln	Gly	Arg	Gly	Arg	Asn	Arg		
			660					665					670				
tgg	gtc	gga	cag	tgc	gtg	gct	tat	gga	gaa	cag	gca	tac	aag	atg	ggc	2064	
Trp	Val	Gly	Gln	Cys	Val	Ala	Tyr	Gly	Glu	Gln	Ala	Tyr	Lys	Met	Gly		
		675					680					685					
atc	aac	gcg	gca	gtg	ggc	gcg	aga	tac	gcc	atc	tgc	gag	gcg	gtc	acc	2112	
Ile	Asn	Ala	Ala	Val	Gly	Ala	Arg	Tyr	Ala	Ile	Cys	Glu	Ala	Val	Thr		
	690					695					700						
aac	atc	atg	cta	gcg	cac	gtg	cgg	cgt	cta	agc	gac	atc	acg	ctg	acg	2160	
Asn	Ile	Met	Leu	Ala	His	Val	Arg	Arg	Leu	Ser	Asp	Ile	Thr	Leu	Thr		
	705				710					715					720		
gcg	tcg	gtc	ggt	tgg	aac	ccg	gag	gac	gac	cag	gcc	tgg	ctc	ctg	cag	2208	
Ala	Ser	Val	Gly	Trp	Asn	Pro	Glu	Asp	Asp	Gln	Ala	Trp	Leu	Leu	Gln		
				725					730					735			
cac	aca	ctg	ttt	gcc	tgc	aag	gaa	cta	tgc	agg	gac	ctg	agc	atc	aac	2256	
His	Thr	Leu	Phe	Ala	Cys	Lys	Glu	Leu	Cys	Arg	Asp	Leu	Ser	Ile	Asn		
			740					745					750				
ttc	gcc	atc	acg	tcg	gcc	ggc	agc	acc	ccg	tgc	ctg	tcg	gaa	gaa	ctg	2304	
Phe	Ala	Ile	Thr	Ser	Ala	Gly	Ser	Thr	Pro	Cys	Leu	Ser	Glu	Glu	Leu		

755	760	765	
atc agc gcc acc caa cag cat cag acg gta gcc ccc gtg ccg ttt aac			2352
Ile Ser Ala Thr Gln Gln His Gln Thr Val Ala Pro Val Pro Phe Asn			
770	775	780	
gca gtc gtc atc acg gcc acc gcc gag gtg aag tcg tcc agg caa cgc			2400
Ala Val Val Ile Thr Ala Thr Ala Glu Val Lys Ser Ser Arg Gln Arg			
785	790	795	800
gtc aca cct gac ctg aag gcc acc ggt aac ctc atc gtg ctg gtg tcc			2448
Val Thr Pro Asp Leu Lys Ala Thr Gly Asn Leu Ile Val Leu Val Ser			
	805	810	815
ttc ccc gtg ccg cac ctg acc cag gga tcg acc ttt gag cac ctg tgt			2496
Phe Pro Val Pro His Leu Thr Gln Gly Ser Thr Phe Glu His Leu Cys			
	820	825	830
ctc ttg ccg agt ccc acc cta ccg gac gtt cag gcg aca cac ctg gcc			2544
Leu Leu Pro Ser Pro Thr Leu Pro Asp Val Gln Ala Thr His Leu Ala			
	835	840	845
aac ctc ttc atg cta aca gag gcc ctg ctc tcc cgg ggt ctg gtg gtg			2592
Asn Leu Phe Met Leu Thr Glu Ala Leu Leu Ser Arg Gly Leu Val Val			
	850	855	860
tcc ggc cac gac gtc agc gac gga ggc atg gtg gtt acc gct atc gag			2640
Ser Gly His Asp Val Ser Asp Gly Gly Met Val Val Thr Ala Ile Glu			
	865	870	875
atg gcc ctg gcc ggt aac cga ggc cta cag att cgc atc ccg tca gag			2688
Met Ala Leu Ala Gly Asn Arg Gly Leu Gln Ile Arg Ile Pro Ser Glu			
	885	890	895
gaa acg ccc ctg cag tgg ctg gtg tcc gaa acc ccg ggc gtc atc ttc			2736
Glu Thr Pro Leu Gln Trp Leu Val Ser Glu Thr Pro Gly Val Ile Phe			
	900	905	910
gaa atc cag ccc cag cac gtc gac gag gtg cgc cag gcg tgc caa aac			2784
Glu Ile Gln Pro Gln His Val Asp Glu Val Arg Gln Ala Cys Gln Asn			
	915	920	925
ttt gac tgc cgg gcc acc gtg tgc ggc acc gtg ggt cag gag ggt ctg			2832
Phe Asp Cys Arg Ala Thr Val Cys Gly Thr Val Gly Gln Glu Gly Leu			
	930	935	940
tca gaa aga atc gtc atc tca cac aac aac gat gaa gtc tat tca cag			2880
Ser Glu Arg Ile Val Ile Ser His Asn Asn Asp Glu Val Tyr Ser Gln			
	945	950	955
acc ctc act tcg gtg gcg gca aac tgg acc tcg ttc tcg gac gaa cag			2928
Thr Leu Thr Ser Val Ala Ala Asn Trp Thr Ser Phe Ser Asp Glu Gln			
	965	970	975
tgg tac tca tgg ggg ccc agc ttc acg ccc gcg cag gaa ctc tac aga			2976
Trp Tyr Ser Trp Gly Pro Ser Phe Thr Pro Ala Gln Glu Leu Tyr Arg			
	980	985	990
aag gac tac ggg tgc aac caa cac aac ctg ggc cac ctc gcc gag gtt			3024
Lys Asp Tyr Gly Cys Asn Gln His Asn Leu Gly His Leu Ala Glu Val			
	995	1000	1005

tgc aga aac agc gaa ctg act ctg ttt gca acg ccg tcg agg ccg cca	3072
Cys Arg Asn Ser Glu Leu Thr Leu Phe Ala Thr Pro Ser Arg Pro Pro	
1010 1015 1020	
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Ala Val Ala Ala Leu Val Thr Pro Gly Ala Pro Leu Pro Arg Ala Leu	
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atg gcc gcc ttc acc aac gtc ggg ttc gac gtc gcg gcc gtc tcc acc	3168
Met Ala Ala Phe Thr Asn Val Gly Phe Asp Val Ala Ala Val Ser Thr	
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gac gac ctt aga gga ggg aac atc ctc cgg gga ttc tcc ggt ctg acc	3216
Asp Asp Leu Arg Gly Gly Asn Ile Leu Arg Gly Phe Ser Gly Leu Thr	
1060 1065 1070	
atc ggt gga acc gtg ggc atc gaa gac agc tac gtg ggg gcc cga tgc	3264
Ile Gly Gly Thr Val Gly Ile Glu Asp Ser Tyr Val Gly Ala Arg Cys	
1075 1080 1085	
gcg atc atg ggt ctt ctc aac gac cct ggg tgc tat ggg ggc ctt atg	3312
Ala Ile Met Gly Leu Leu Asn Asp Pro Gly Cys Tyr Gly Gly Leu Met	
1090 1095 1100	
gcc ttc ttc cgc cga gcg gat aca ttt tca cta tgc tgc ggg gag ttt	3360
Ala Phe Phe Arg Arg Ala Asp Thr Phe Ser Leu Cys Cys Gly Glu Phe	
1105 1110 1115 1120	
ggg ttc cag ctc ctg ggg gcg ctc ggt ctt ctt aga gag acc cct cac	3408
Gly Phe Gln Leu Leu Gly Ala Leu Gly Leu Leu Arg Glu Thr Pro His	
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gac acg ccc gga ccc aaa acc ccc gac cag tgg gac atc cac ctg gag	3456
Asp Thr Pro Gly Pro Lys Thr Pro Asp Gln Trp Asp Ile His Leu Glu	
1140 1145 1150	
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Glu Asn Ala Ser Gly Asn His Glu Cys Leu Trp Leu Asn Leu His Ile	
1155 1160 1165	
ccc cag acc acc atc agc atc atg ttt agg gtt ctt cgg ggc ctc gtc	3552
Pro Gln Thr Thr Ile Ser Ile Met Phe Arg Val Leu Arg Gly Leu Val	
1170 1175 1180	
ctc cca ggg tgg gcc aac ggc cgg tac ctg ggc gtg aga tac ccg cgc	3600
Leu Pro Gly Trp Ala Asn Gly Arg Tyr Leu Gly Val Arg Tyr Pro Arg	
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gac gcc atg gag tac cat ctc aac cag cag cag cgc atc gcc ctg aac	3648
Asp Ala Met Glu Tyr His Leu Asn Gln Gln Gln Arg Ile Ala Leu Asn	
1205 1210 1215	
tac cac acg ggc aac gcc gac ccg agg atg ttc gcg cag cac tac cca	3696
Tyr His Thr Gly Asn Ala Asp Pro Arg Met Phe Ala Gln His Tyr Pro	
1220 1225 1230	
cgc aac ccg tct gcc aac tcg gcc gtg gcc gcc atc acg tca ccg gac	3744
Arg Asn Pro Ser Ala Asn Ser Ala Val Ala Ala Ile Thr Ser Pro Asp	
1235 1240 1245	

ggg cgc cac ctg gcc tcc ctg gtc gac ccc gcc gtg acg ttc cac ccc 3792  
 Gly Arg His Leu Ala Ser Leu Val Asp Pro Ala Val Thr Phe His Pro  
 1250 1255 1260

tgg cag tgg gcg tac gtg ccg ccc gag ctt gcg gac atg aca gtt tcc 3840  
 Trp Gln Trp Ala Tyr Val Pro Pro Glu Leu Ala Asp Met Thr Val Ser  
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ccg tgg gcg ctg gcc ttc cag tcc ctg ttc ctc tgg tgc ata aga aac 3888  
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 Arg Gln

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 <213> Macaca mulatta rhadinovirus 17577

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 Thr Arg Pro Ser Asp Asn Phe Asp Asn Asp Asp Asp Asp Pro Ala Leu  
 50 55 60  
 Gly Val Ile Trp His Leu Leu Ala Pro Leu Val Asn Tyr Ala Pro Leu  
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 Glu Thr Arg Ser Ala His Leu Gln Gly His His Thr Ile Ser Leu Pro  
 85 90 95  
 Tyr Gly Pro Asp Leu Met Arg Gln Pro Thr Thr Arg Ser Ser Glu Ile  
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 Val Gln Cys Leu Arg Asp Ser Gly Leu Asp Arg Thr Leu Arg Leu Glu  
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 Val Gly Arg His Leu Ser Cys Gln Thr Arg Arg Phe Val Ala Asp Arg  
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 Val Pro Pro Gly Thr Leu Ala Ala Leu Thr Leu Gly Thr Leu Val Glu  
 145 150 155 160  
 Tyr Asp Val Arg Val Gln Arg Gln Leu Pro Val Thr Leu Gln Ser Thr  
 165 170 175  
 Ala Trp Arg Pro Leu Pro Glu Arg Asp Pro Ile Cys Ala Ala Val Met  
 180 185 190  
 Leu Pro Leu Gln Arg Asn Ile Leu Pro Leu Ala Val Gln Ala Ser Asn  
 195 200 205  
 Gly Asn Ser Tyr Thr Val Ser Arg Tyr Ala Val Met Ala Arg Arg Ser  
 210 215 220  
 Tyr Ser Cys Val Phe Gln Arg Leu Pro Cys Glu Asn Val Thr His Ile  
 225 230 235 240  
 Ala Asp Ser Phe Thr His Leu His Ser Ala Ile Gln Thr Gly Ala Gly  
 245 250 255  
 Ala Leu Gln Asn Ile Leu Phe His Ala Thr Leu Leu Pro Gly Gly Glu  
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 Ile Arg Ser Ala Leu Cys Gly Phe Tyr Ala Thr Thr Pro Ser Val Gly  
 275 280 285  
 Ala Phe Ser Arg Ala Arg His Arg Ala Ile Asn Thr Thr Ala Thr Leu  
 290 295 300  
 His Cys Gln Gln Leu Ala Arg Thr Gly Thr Pro Val Leu Gly Gly Phe



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Leu	Lys	Thr	Val	His	Ser	Ala	Thr	Thr	Ser	Glu	Ala	Asn	Val	Ile
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Thr	Thr	Ser	Leu	Leu	Ser	Cys	Val	Pro	Gln	Ala	Tyr	Thr	Phe	Leu
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Arg	Ser	Leu	Phe	Ser	Gln	Pro	Ile	Ile	Cys	Leu	Gly	Ser	Phe	Glu
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Val	Asp	Gly	Asp	Gly	Asn	Gln	Arg	Ser	Leu	Tyr	Leu	Gly	Ser	Ala
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Gly	Ile	Thr	Arg	Ile	Thr	Gln	Thr	Leu	Ser	Leu	Ala	Tyr	Glu	Ile
385					390					395				400
Glu	Gly	Pro	Leu	Phe	Thr	Ser	Ile	Asn	Arg	Ala	His	Glu	Pro	Ala
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Val	Ile	Gly	His	Leu	Gly	Ala	Leu	Val	Ser	Arg	Gly	Gly	Leu	Arg
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Phe	Val	Ser	Gln	Leu	Pro	Pro	Thr	Ile	Leu	Ser	Gln	Leu	Thr	Ala
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Pro	Asp	Ile	Ser	Arg	Glu	Thr	Val	Asn	Asp	Ile	Leu	Val	Asn	Lys
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Cys	Gly	Cys	Pro	Phe	Ala	Val	Val	Gly	Glu	Thr	Cys	Glu	Glu	Leu
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Ile	Gln	Phe	Val	Asn	Asp	Leu	Glu	Leu	Trp	Asn	Pro	Gly	Ala	Trp
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Glu	Gln	Pro	Val	Ser	Ser	Asn	Trp	Leu	Val	Arg	Pro	Glu	Glu	Pro
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Asp	Gly	Gly	Glu	Gln	Ala	Pro	Ser	Pro	Thr	Asp	Trp	Gly	Leu	Phe
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			580					585					590	Ser
Lys	Glu	Phe	Val	Thr	Arg	His	Val	Asp	Arg	Cys	Ser	Asn	Gly	Leu
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Ala	Gln	Gln	Cys	Glu	Val	Gly	Pro	Leu	Gly	Arg	Pro	Leu	Ser	Asp
	610					615				620				Tyr
His	Ile	Val	Asn	His	Thr	Ser	Val	Phe	Thr	Asp	Arg	Met	Ala	Arg
625					630					635				Val
Pro	Ile	Tyr	Arg	Pro	Gln	Pro	Ile	Thr	Arg	Gln	Asp	Ala	Thr	Glu
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Leu	Val	Ser	Pro	Glu	Thr	Trp	Val	Thr	Gln	Gly	Arg	Gly	Arg	Asn
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Trp	Val	Gly	Gln	Cys	Val	Ala	Tyr	Gly	Glu	Gln	Ala	Tyr	Lys	Met
	675						680					685		Gly
Ile	Asn	Ala	Ala	Val	Gly	Ala	Arg	Tyr	Ala	Ile	Cys	Glu	Ala	Val
	690					695				700				Thr
Asn	Ile	Met	Leu	Ala	His	Val	Arg	Arg	Leu	Ser	Asp	Ile	Thr	Leu
705					710					715				Thr
Ala	Ser	Val	Gly	Trp	Asn	Pro	Glu	Asp	Asp	Gln	Ala	Trp	Leu	Leu
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His	Thr	Leu	Phe	Ala	Cys	Lys	Glu	Leu	Cys	Arg	Asp	Leu	Ser	Ile
			740					745					750	Asn
Phe	Ala	Ile	Thr	Ser	Ala	Gly	Ser	Thr	Pro	Cys	Leu	Ser	Glu	Glu
	755						760					765		Leu
Ile	Ser	Ala	Thr	Gln	Gln	His	Gln	Thr	Val	Ala	Pro	Val	Pro	Phe
	770					775					780			Asn
Ala	Val	Val	Ile	Thr	Ala	Thr	Ala	Glu	Val	Lys	Ser	Ser	Arg	Gln
785					790					795				Arg
														800

Val Thr Pro Asp Leu Lys Ala Thr Gly Asn Leu Ile Val Leu Val Ser  
 805 810 815  
 Phe Pro Val Pro His Leu Thr Gln Gly Ser Thr Phe Glu His Leu Cys  
 820 825 830  
 Leu Leu Pro Ser Pro Thr Leu Pro Asp Val Gln Ala Thr His Leu Ala  
 835 840 845  
 Asn Leu Phe Met Leu Thr Glu Ala Leu Leu Ser Arg Gly Leu Val Val  
 850 855 860  
 Ser Gly His Asp Val Ser Asp Gly Gly Met Val Val Thr Ala Ile Glu  
 865 870 875 880  
 Met Ala Leu Ala Gly Asn Arg Gly Leu Gln Ile Arg Ile Pro Ser Glu  
 885 890 895  
 Glu Thr Pro Leu Gln Trp Leu Val Ser Glu Thr Pro Gly Val Ile Phe  
 900 905 910  
 Glu Ile Gln Pro Gln His Val Asp Glu Val Arg Gln Ala Cys Gln Asn  
 915 920 925  
 Phe Asp Cys Arg Ala Thr Val Cys Gly Thr Val Gly Gln Glu Gly Leu  
 930 935 940  
 Ser Glu Arg Ile Val Ile Ser His Asn Asn Asp Glu Val Tyr Ser Gln  
 945 950 955 960  
 Thr Leu Thr Ser Val Ala Ala Asn Trp Thr Ser Phe Ser Asp Glu Gln  
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 Trp Tyr Ser Trp Gly Pro Ser Phe Thr Pro Ala Gln Glu Leu Tyr Arg  
 980 985 990  
 Lys Asp Tyr Gly Cys Asn Gln His Asn Leu Gly His Leu Ala Glu Val  
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 Ala Ile Met Gly Leu Leu Asn Asp Pro Gly Cys Tyr Gly Gly Leu Met  
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 Gly Phe Gln Leu Leu Gly Ala Leu Gly Leu Arg Glu Thr Pro His  
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 1140 1145 1150  
 Glu Asn Ala Ser Gly Asn His Glu Cys Leu Trp Leu Asn Leu His Ile  
 1155 1160 1165  
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 1235 1240 1245  
 Gly Arg His Leu Ala Ser Leu Val Asp Pro Ala Val Thr Phe His Pro  
 1250 1255 1260  
 Trp Gln Trp Ala Tyr Val Pro Pro Glu Leu Ala Asp Met Thr Val Ser  
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<220>  
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<210> 172  
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<400> 172  
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cgtcaccgaa accccaaaca tgatgcttta ggttgcggtt ggggatatct ttcggtgccc 180  
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<210> 174  
<211> 304  
<212> DNA  
<213> Macaca mulatta rhadinovirus 17577

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ttgccttgcc gcctagctcc taatgtttgc cttgccgcct agctcctaag gtttgcttg 180  
ccgcctagct cctaattgtt gccttgccgc ctatctccta atgtttgcct tgccgcctag 240  
ctctaatgt ttgccttgcc gcctagctcc taatgtttgc cttgccgcct agctcctaag 300  
gttt 304

<210> 175  
<211> 1008  
<212> DNA  
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<400> 175

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<210> 176

<211> 405

<212> DNA

<213> Macaca mulatta rhadinovirus 17577

<400> 176

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caagtcccc ggtggggtgc aagtcccccg gtgggggtgca agtcccccg tgggggtgcac 240
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cccccggtgg gtgcaagtc ccccggtggg ttcaagtc ccccggtgggt gcaagtc ccccggtgggtg 360
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<210> 177

<211> 1029

<212> DNA

<213> Macaca mulatta rhadinovirus 17577

<400> 177

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<211> 196  
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<210> 179  
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 <212> DNA  
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